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GARRISON DAM AND LAKE SAKAKAWEA

HEARINGS
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ONE HUNDRED FIRST CONGRESS
FIRST SESSION
ON THE
IMPACT OF GARRISON DAM AND LAKE SAKAKAWEA
ON LOCAL COMMUNITIES

PARSHALL, ND, AUGUST 25, 1989
BISMARCK, ND, OCTOBER 9, 1989



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GARRISON DAM AND LAKE SAKAKAWEA

FRIDAY, AUGUST 25, 1989

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Parshall, ND.

The subcommittee met, pursuant to notice, at 9:30 a.m., at the Parshall Hall Auditorium, Parshall, ND, Hon. Kent Conrad, presiding.

OPENING STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM NORTH DAKOTA

Senator CONRAD. The Water and Power Subcommittee of the Senate Committee on Energy and Natural Resources will come to order. I first want to advise you that this is an official hearing of the U.S. Congress. It will be conducted under the rules we follow in Washington. Those rules simply are that we treat everyone with respect. We give everyone a full chance to express themselves. We will first hear from the witnesses that have been officially called for the hearing. And when those witnesses have completed their testimony and the questions have been completed we will open it up to the audience for their questions and their input.

We hope to give everyone who has come here today a chance to express themselves.

I would also like to introduce Tom Jensen, counsel with the Energy Committee who is here with us today. We very much appreciate his coming to North Dakota to participate.

To my right is Tobyn Anderson, who is my staff person on the Energy Committee in Washington. Tobyn is originally from Valley City, North Dakota. He was counsel with me in the North Dakota Tax Department. He has been excellent staff for me in Washington.

I would also like to thank the distinguished chairman of the Energy Committee, Senator Bennett Johnston, and the distinguished chairman of the Subcommittee on Water and Power, Senator Bradley for agreeing to hold this hearing. Neither member is able to join us this morning, but both members understand the importance of water development to North Dakota. I very much appreciate their interest and attention to this issue.

I also want to thank the people who have agreed to appear as witnesses before this hearing today, and the other people who have taken time to come to this hearing. Your input and support will be important as congress considers the impact of water development in our region.

Let me give a special thanks to Stanley Wright. Senator Wright helped organize this hearing, and encouraged me to hold this hearing. I want to publicly express my thanks to him for his assistance in this matter and his serious attention to this issue.

As many of you know the impoundment of water behind the mainstream Missouri River dams under the Flood Control Act of 1944 created many benefits for our region. It also created many problems. In addition, many features of the Act remain incomplete. Not the least of which is completion of the Garrison Diversion Project.

Congress must also act to implement the provisions of the Joint Tribal Adversary Committee. Those recommendations indicate that the tribes sacrificed much for development of Garrison and they are entitled to further compensation for sacrifices they made which were not appropriately compensated at the time of the taking. The Federal Government has not kept its part of the bargain on Garrison with respect to many issues. Each year state leaders and the congressional delegation must fight budget cuts for the project. We must do this each year despite the promise of the Federal Government, renewed most recently in the Reformulation Act of 1986, to move toward rapid completion of the project. Funding for completion remains one of the highest priorities for this state. Completed portions of the Garrison Project have also suffered certain problems.

While there are many issues associated with impacts from the project and management of the mainstream dams, our focus this morning will be relatively limited, because we have a limited amount of time. The purpose of today's hearing is to examine the impact of the project upon the infrastructure of counties that host major features of the Garrison Project. The 1987 session of the North Dakota Legislature, in Senate Concurrent Resolution #4004, recognized the impacts of the project upon local government and individuals. The resolution also called for the Federal Government to assist local governments in meeting the needs of impacts from Garrison. I concur with the message of the North Dakota State Government as embodied in North Dakota Senate Concurrent Resolution #4004. I believe that the Federal Government has an obligation to provide support for impacts associated with major federal projects such as Garrison.

We are here today to learn more about those impacts and to examine ways in which the Federal Government may be able to assist local governments and residents in meeting those needs.

Let me add that in recent days another issue has come to the fore. And that is the question of lake levels on Sakakawea. All across this state as I have been holding meetings people have come to me and said we cannot allow the lake level to decline the projected additional 10 feet. That would create extreme hardship for the tourism industry and for individuals and organizations that are dependent upon a lake level that has already dropped dramatically. I am hopeful that we will hear from people on that question. We are very fortunate to have with us today Brigadier General Robert Ryan, with the U.S. Army Corps of Engineers, who will be our final witness. We will have a chance to discuss the issues that we have identified in addition to the question of lake levels.

We are going to proceed with several panels. Panel I is made up of local government and citizen representatives. We will start with an introduction by the Hon. Stanley Wright, a former State Senator from this district. We will then hear from Gene Sloan, Manager of the Rural Telephone Association in Parshall; Dale Peterson, Mountrail County Commissioner; Darold Peterson, President of Lakeside State Bank of New Town; Loren Hoffman, the Auditor of the City of Parshall.

We will then turn to Panel II, Tribal Government Representative. We are privileged to hear from Ed Lone Fight, the distinguished Chairman of the Three Affiliated Tribes of the Fort Berthold Reservation.

And then Panel III, Public Power will be represented by Dennis Hill, General Manager of the North Dakota Association of Rural Electric Cooperatives.

And finally Panel IV, the Federal Government Representative, Roger Patterson, Regional Director of the Great Plains Region, the Bureau of Reclamation. And as I indicated earlier we will conclude with Brigadier General Robert Ryan of the U.S. Army Corps of Engineers.

So, that is the lineup. At the end of each panel we will have time for questions. When we are done with the formal witnesses we will open it for audience participation.

Without further ado I turn it over and welcome Stanley Wright. Again, Stanley Wright, thank you for your assistance in putting together this hearing.

[The prepared statement of Senator Conrad and letter from Governor Sinner follow:]

STATEMENT OF

SENATOR KENT CONRAD

FIELD HEARING BEFORE THE WATER AND POWER SUBCOMMITTEE

SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

Parshall, North Dakota

August 25, 1989

Good morning. I would like to thank the distinguished Chairman of the Energy Committee, Senator Johnston, and the distinguished Chairman of the Subcommittee on Water and Power, Senator Bradley, for agreeing to hold this hearing. Neither member is able to join us this morning, but both members understand the importance of water development to North Dakota, and I very much appreciate their interest and attention to this issue.

I also want to thank the people who have agreed to appear as witnesses before our panel today, and the people who have taken time to come to this hearing. Your input and support will be important as Congress considers the impacts of water development in our region.

The impoundment of water behind the mainstem Missouri River dams under the Flood Control Act of 1944 created many benefits for our region, but it also created many problems. In addition, many features of the Act remain incomplete, not the least of which is completion of the Garrison Diversion Water Project.

Congress must also act to implement the recommendations of the Joint Tribal Advisory Committee. The Tribes sacrificed much for the development of Garrison, and they are entitled to compensation for those sacrifices.

The federal government has not kept its part of the bargain on Garrison, and each year state leaders and the congressional delegation must fight budget cuts for the project. We must do this each year despite the promise of the federal government -- renewed in the Reformulation Act of 1986 -- to move toward rapid completion of the project. Funding for completion of the project remains one of the highest priorities for state leaders.

For those portions of the Garrison Project that are complete, there have also been associated problems. While there are many issues associated with impacts from the Project and management of the mainstem dams, our focus this morning will be relatively limited because we have a limited amount of time.

The purpose of today's hearing is to examine the impacts of the Project upon the infrastructure of counties that host major features of Garrison. The 1987 Session of the North Dakota Legislature, in Senate Concurrent Resolution No. 4004, recognized the impacts of the project upon local governments and individuals. The resolution also called upon the federal government to assist local governments in meeting the needs of impacts from Garrison.

I concur with the message of North Dakota Senate Concurrent Resolution 4004, and I believe that the federal government has an obligation to provide support for impacts associated with major federal projects such as Garrison. We are here today to learn more about those impacts, and to examine ways in which the federal government may be able to assist local governments and residents in meeting those needs.



GEORGE A. SINNER
GOVERNOR

State of North Dakota

OFFICE OF THE GOVERNOR
BISMARCK, NORTH DAKOTA 58105
(701) 224-2200



August 24, 1989

The Honorable Kent Conrad
United States Senator
361 Dirksen Office Building
Washington, D.C. 20510

Dear Senator Conrad:

I would like to offer the following comments for the record in regard to the Garrison infrastructure hearing you are holding. Let me first say I appreciate your active involvement in following up on the JTAC study and SCR 4004.

As you know, North Dakota's direct and viable benefits from the Garrison project have not matched the benefits promised by the Pick-Sloan plan. Instead of a major irrigation project and widespread municipal water supply systems, we have had to fight just to keep the project alive. One very positive benefit that has evolved over the years, almost on its own, is the tremendous recreational resource that Lake Sakakawea has become. Tourism is now our third largest industry, and the lake has played a major role in developing that industry.

Because recreational facilities have virtually "popped up" overnight around the lake, infrastructure needs, particularly roads, have not kept pace with demand. As recreationists become more sophisticated in their equipment and activities, they contribute more to the economy. They also require better roads, water, sewer and power.

We at the state level have worked hard with the private sector to develop and encourage this embryonic industry. Unfortunately, we cannot hope to keep up with the demand for services. Anything you can do on the Water and Power Subcommittee to help meet these needs in the Lake Sakakawea region will be greatly appreciated by the people of North Dakota. As you know, this is not a mere matter of fun and games, but a crucial factor in our state's economy.

Sincerely,

George A. Sinner
Governor

GAS:JE:ksp

**STATEMENT OF STANLEY WRIGHT, FORMER NORTH DAKOTA
STATE SENATOR**

Mr. WRIGHT. Thank you, too, Senator Conrad, for being in our community visiting with our serious subject that we have before us today. I also want to say thanks to Tom and Tobyn for all the help they have done and helped coordinate this with your timing. Thank you gentlemen.

For starters, Senator, if you will so allow I will like to quickly read through this Regulation 4004 so that everyone here does understand it. And it is very meaningful and will help us stay on track I feel. The legislative session of 1987 passed this Resolution 4004 unanimously during the 1987 session and the testimony was very supportive of it from all sides of government.

This Resolution urging the Congress of the U.S. to implement the recommendations of the Garrison Unit Joint Tribal Advisory Committee concerning the effects of the impoundment of waters under the Pick-Sloan Missouri Basin Program on the Fort Berthold and Standing Rock Indian Reservations and urging the creation of a similar advisory committee to review the impact of the impoundment of waters on the economic base of non-tribal interests also.

And Senator, a little interruption there. I understand what you are trying to do is to get this information into your hands through this process this way. And while we are referring to this type of a committee being formed I fully understand this probably will do the job. But the words in here won't sound like your committee this moment.

Whereas, the Garrison Diversion Unit Commission was established by an act of Congress, Public Law 98-360, to review the contemporary water development needs of the State of North Dakota; and

Whereas, the Garrison Diversion Unit Commission, in its final report to the Secretary of the Interior and committees of the Congress of the United States, agreed with the Congress that a moral commitment was made in 1944 to the Upper Missouri Basin States and Indian Tribes with the passage of the Pick-Sloan Missouri Basin Program, and found that the State of North Dakota sacrificed hundreds of thousands of acres of land, much of it prime river bottom land, for the greater benefit of the nation; and

Whereas, the Garrison Diversion Unit Commission further found that the Federal Government promised but has not provided assistance to replace the economic base of the state and Indian tribes affected; and

Whereas, at the recommendation of the Garrison Diversion Unit Commission, the Secretary of the Interior on May 10, 1985, established the Garrison Unit Joint Tribal Advisory Committee to examine the impact of the impoundment of waters under the Pick-Sloan Missouri Basin Program on the Fort Berthold and Standing Rock Indian Reservations; and

Whereas, the Garrison Unit Joint Tribal Advisory Committee held several hearings during which it was made aware of the accuracy of the observation of the Garrison Diversion Unit Commission that the tribes of the Fort Berthold and Standing Rock Indian Res-

ervations bore an inordinate share of the cost of implementing the Pick-Sloan Missouri Basin Program main stream reservoirs; and

Whereas, the Garrison Unit Joint Tribal Advisory Committee made findings and recommendations to find ways to resolve inequities borne by the tribes and to provide full potential for irrigation and financial assistance for on-farm development costs, development of shoreline recreation potential, return of excess lands, protection of reserved water rights, replacement of infrastructures lost by the creation of the Garrison and Oahe Reservoirs, preferential rights to Pick-Sloan Missouri Basin Power, additional financial compensation, and many other items; and

Whereas, the inundation of rich Missouri River bottom land by the Garrison and Oahe Reservoirs and project delays have resulted in agricultural, mineral, and forestry losses not only to tribal interests but non-tribal interests as well.

And I understand that from your input from this Hearing today, Senator, maybe you can save a great deal of money for our Congress from your crew here today to take input on it, on the subject.

Just a couple of quick short remarks with regard to my philosophy. I feel that the federal, I call it our government, is the Federal Government, has to update itself, Senator, and the comparison of present taxation that is being paid to our counties around this lake, the 11 of them is approximately 75 cents per acre. Now that amendment was passed relatively recent to do that approximately 1976. And I think it will be brought out, but my comment about that, I think Mountrail County's average would be approximately \$2.50 an acre for the average taxpayer that owns farmland in this county. And that would make sense to me if the Federal Government and the input to you would be able to be considering such a correction. The Federal Government has to update or correct acres also. Example, like in Mountrail County is being paid approximately 75 cents an acre of 60,709 acres. The information that I have presented to you and to many of the Commissioners through the territory there is quite a difference in acreages and things of that manner should be looked into. As an example of the information that was presented to me during the session Mountrail County itself lost 66,016 acres. That information is attached to my information that I have sent to you previously. But what I am getting at when I talk about those matters if we can receive an even 75 cents an acre for the past few years we are losing out if the records aren't correct.

Remember what I did say that I think an average thing at \$2.50 would look more sensible today from 1944 is the time that it was lost of the tax rolls. You maybe know the reason why the amendment only went back to 1976. But I don't think that is sufficient.

We feel it is time the Garrison and Oahe Reservoirs are revived and updated and corrected as Pick-Sloan Act requires. It is my understanding that it says that in the Pick-Sloan Act that we rightfully should have regular hearings to keep things updated with Congress and the local governments. In no way do I want the in lieu of tax issue confused with the lease money local farmers are paying to the U.S. government and then in turn they return it to the county governments. I personally believe that that rate that the farmers are paying now should not be raised or changed, but

should be properly and promptly processed back to each county in a manner that can be understood by all. You will hear more about this issue later.

Once more so that we understand one another, please understand that I do not want to take anything away from the benefits that will be derived from the public hearings which have already been held for the tribal government concerns on the impoundment of water under the Pick-Sloan Missouri Basin Program on the Fort Berthold and Standing Rock Indian Reservations. As a matter of fact I sincerely hope the benefits of those hearings can be stepped up and got into place in accordance with the needed requests by the tribal governments. And you do already have that information, Senator.

I believe, Senator, that I will move right along now and save time. I know you are squeezed. And we are supposed to be right on schedule.

So immediately following me will be Gene Sloan, the Reservation Telephone Cooperative Manager. Gene, will you take over.

STATEMENT OF GENE SLOAN, MANAGER, RURAL TELEPHONE ASSOCIATION, PARSHALL, ND

Mr. SLOAN. Thank you Stanley. Senator Conrad, first of all thanks for coming out. This is representative government at its best. And we really appreciate it. It is truly refreshing to have a politician in town during the off-season. By off-season I mean when you are not campaigning.

The second thing I would like to do is to explain I am not related to the Sloan who helped create the Pick-Sloan Missouri River Basin Plant. Most of my relatives live in northern Alberta along the Swan River. And they have no dam on the river and they enjoy it that way.

I remember the Missouri River floods at Bismarck and how glad the people at Bismarck were when a solution to the flooding problem was announced. Little did I realize as a teenager back in Kidder County what this meant to the people in Mountrail County. I don't think Congress realized either what the negative impact would be or the dam never would have been built. In fact, there was no way to project or measure the long-range impact of what has happened and what happens when you take thousands of acres of prime river bottom, some of the best land in the world, out of production and you displace hundreds of people. You can't replace a way of life with money or anything else.

Some 37 years have gone by now since the great flood and the total impact is still hard to define. And that is a point I would like to make. We are dealing with something here that is very difficult to define. We see it, we live it. But to put actual numbers on it is tough. We still don't have a solution that we are all working together on. That is one of our problems. We really haven't pooled our resources and went to work on it collectively.

And that is what I hope you can help us do, Senator, is form a plan that we can work together on, both Indian and non-Indian. That is essential.

I wish I could sit up here today and spout figures on how much we have been impacted. I wish I could tell you we need X number

of dollars and how much brick and mortar would make it all right. But I can't. The only thing we really know for sure is that the nation and the State of North Dakota as you have said benefited by the Garrison Dam and this area lost. And it is a loss still being felt. And as you have also said very well that the Federal Government has an obligation to help us develop what we have left. Lake Sakakawea is a tremendous resource, especially when we have water in it. And you are addressing that issue which I am glad to hear.

Lake Sakakawea in our area needs to be developed. The east end of the lake and on the south side I think you can see better development than what we have. That is one of our problems is being able to develop what we have been left. Thanks to you Senator and Senator Burdick, Mountrail County was awarded \$3.5 million for paving the roads through Parshall Bay and Van Hook part on an 80/20 percent maximum basis demonstration project. And that sounds good. It sounds like an answer. The North Dakota Highway Department came up with 10 percent of that 20. Which I think was great. They went over and above what we really thought we could do. The landowners agreed to donate the right of way needed. And this I think exemplifies how we feel up here about developing our roads. Leaving about six percent or \$200,000 for the Mountrail County Commissioners to come up with to utilize the fund.

The Commissioners have told us repeatedly that they will have trouble utilizing this money because of the six percent that matching that they have to come up with. This is a matter of being too poor to help yourself. Classic example of it. And it is a very serious problem when you are too poor to help yourself. We need the facility, everybody agrees to that. But when you can't come up with six percent to bring home \$3.5 million I think that illustrates what we are up against.

Developing ramps and roads on Lake Sakakawea is just one of the many things we need help with. Like every other area in North Dakota we need economic development. And I know, Senator, you are working hard on that issue. And we thank you and we ask you to keep up the good work. And keep us in mind when you hear of a business that is looking for a good place to do their thing because we have the people, the land, the water, and resources to do that. Like most of North Dakota has. And I really appreciate all of the work that you are doing. I think if everyone in the state and representing us was doing the amount of work you are we would see some result.

Right now I realize it is a tough battle. There are hundreds of other cities in the state in the surrounding states trying to do the same thing we are trying to do.

We ask you to come back again even if you are campaigning. Thanks Senator.

Senator CONRAD. Thank you Gene. All of this talk about Sakakawea and lake levels reminds me of an experience I had in a small cafe. I was in this cafe and saw a sign on the wall. And it simply said this: Need wife. Looking for woman who can cook and clean fish, bait hooks, dig worms. Must have boat and motor. Please send picture of boat and motor.

Now there is somebody that has got their priorities right. We may need to call him in. Stanley, if you can identify who that was who was advertising that way we will get him in here to testify.

Thank you very much, Gene, for your testimony. Next we will hear from Dale Peterson, a Mountrail County commissioner from New Town. Welcome, Dale.

**STATEMENT OF DALE PETERSON, COUNTY COMMISSIONER,
NEWTOWN, ND**

Mr. DALE PETERSON. Thanks for coming, Senator. Speaking for Mountrail County I would like to thank you for coming to our area to hear of our concerns. A major problem for the county is meeting the match on demonstration projects. We have two of them in progress right now. One is being held. The other, the surveying is about to begin. And as far as we can see at the moment all we can do is grade and gravel them. And we have another one that has been requested into the White Earth Indian Reservation. That is nine miles. And all of these are used very heavily. The traffic counts are huge. And with three dry years in a row there isn't an awful lot you can do with them other than rebuilding them. This traffic is causing damage to roads that were in many instances built in the 30's. And fishermen will come. If there is fish biting they will come. And we have them from every state in the union except Hawaii. I haven't seen anybody from Hawaii with the license plate on next to the lake.

Traffic is continuous from Memorial Day until Labor Day. And then the diehard fishermen, there is another run of biting in late September, early October. And that goes on until the fish quit.

Our local people, mailmen, schoolbuses, and occasionally the sheriff, ambulance and fire department also have to use these roads through the summer and throughout the rest of the year. And it really creates a hardship for people who have to haul grain and cattle and do all of the other things they have to do going back and forth to wherever they go. Our sheriff and fire department have to be on-call to fish these people out of the lake. And they do fall in once in a while. The ambulance has to respond to wherever they have to go. And these roads just raise Cain with an ambulance and really shortens up their response time.

Rebuilding these roads is keeping the county broke. And it is impossible to explain to the people in the northern part of the county why we are spending money to build these roads for fishermen. They also have road problems. Some of these roads also are major traffic arteries and need help. We have got 238 miles of gravel roads that need upgrading; 56 of them I believe are in immediate need of grading and graveling. We have 96 miles of paved roads which we are having a hard time just maintaining a crack sealing and so forth. And these as far as our local people are concerned are more important than fishing roads. I should say the majority of our fishing traffic comes from outside the area.

And I can understand these folks up north. We try to run a four mill, five mill levy in the last election to increase our highway budget. And we gave them the best that we could. We said this will last for four years and if things improve or you don't want to pay it

anymore it will come up for a vote again. And it went down to a resounding defeat. They are very unhappy with the money we are spending down here. In fact, we are going to have a hard time meeting the match for the grading and graveling. And they should be paved. The dust on those roads absolutely total off a crop on the down-wind side for 10 rods with the summer drought we have had.

The tourist, fishing and camping traffic is good for our local economy. But very little of that gets back to the county. It has been an essential part of local economy. There are businesses that are based on this traffic. And if our roads get any worse than they are we are going to lose that to the areas that are maybe more acceptable. And it is going to hurt our New Town and Parshall in particular. We sit on the most scenic part of the lake. And I think it is one of the more desirable areas, because of all of the bays we have. We did get in on the access highway lake program quite a number of years ago with 22 miles of pavement. And that opened up probably Pouch Lake Bay, Reunion Bay, and Little Field Bay. And they are heavily used. Two of those bays are in a very primitive state. And I think we have to have that kind of thing too. We have people that can't come with \$20,000 worth of pickup and \$20,000 worth of boat. They like to come with a pickup and a camper and a bunch of kids and sit on the lake and fish on the shore. And it doesn't cost anything. And so we need those areas.

But Van Hook and Brendle Bay are very choice areas and need this improvement. What the county gets out of this again is very small.

Now when we talked to you quite a while ago I wasn't aware, I was a brand new commissioner still. I wasn't aware that the county was getting in the area of \$45,000, \$40,000, \$45,000 a year from the Department of Interior in lieu of taxes since 1977. And is designated for the general fund or such other use as the county may wish to use it for.

Now that sounds like a lot of money. But when you are buying maintainers and maintaining a lot of road it doesn't go very far. But I think the major point is that was a good thing starting in 1977. There was 30 years in there we didn't get anything. And that amount of money, \$45,500 if you had simple interest during those 30 years would amount to \$3.8 million. Boy, could we build roads for that. So I feel we have something coming yet. We appreciate whatever effort you can do for us to resolve the access to the lake problem.

One other thing if we don't get good roads they will cut the fence and drive across somebody's pasture. And this has been known to happen. We would rather have good roads and good areas and people will stay. Thank you Senator.

Senator CONRAD. Thank you very much, Dale, for that testimony. Next we will hear from Darold Peterson, the President of the Lake-side State Bank in New Town.

Welcome Darold.

**STATEMENT OF DAROLD PETERSON, PRESIDENT, LAKESIDE
STATE BANK**

Mr. DAROLD PETERSON. Thank you, Senator. I would like to thank you and your staff on behalf of New Town for holding this Hearing today. I don't know that I have anything new to say. You have heard it already in the news media. But it seems that the way the system works you have to continue to grind away to get the changes accomplished.

I have been in business in New Town in more than one business for over 20 years. I have been active in various civil groups including the New Town Marina, the New Town Golf Association, the Chamber of Commerce, the New Town Development Corporation, and the Airport Authority. And I have been able to observe the impact of the lake on our community. It is no secret what is happening to small communities in North Dakota. We are going through one of the most severe economic adjustments since home-
stead days. And it is my opinion that technology is part of the problem along with the crop prices, the drought, and government credit programs. So we need something in addition to agriculture. And New Town, I think this applies to other communities around the lake, have worked very hard to capitalize on tourism. We have no way of measuring actual dollars in our communities, but it has been a very important part of our economy in New Town, especially in the summer months. We have developed marina facilities, campgrounds, a new golf course, motel rooms, paved airport. We spend thousands of dollars promoting this lake. My own business spent \$6,000 for highway signs in 1987 and 1988 just to bring people to this lake. We are extremely concerned with the level of the lake. We have extended our boat ramps many times. This last spring we extended another 55 feet. Right now the water is down to the bottom of the ramp. We have some mesh in there to accommodate the small fishing boats. Further drop of our lake level will destroy our efforts in the immediate future and our investment. We are in need of some assistance on the access road to the lake, including maintenance of the same. We were deprived of a large tax base when the area was purchased by the government to develop a Missouri Dam system. We are still sacrificing tax bases through programs like HUD that have had to relocate housing for the Fort Berthold Indian people. We in western North Dakota have sacrificed much in the loss of rich river bottom land. And we have received little in return. The benefits going to cheap power and navigation, flood control downstream even Garrison Diversion has become a job. We need help and assistance to maintain and develop our recreation potential. Dredging of our marina areas should be considered. I understand the Corps participates downstream in dredging. I don't know if that is correct. It is impossible on a local basis to do that. We need help to install temporary boat ramps and not just in some of the state park areas or the designated Corps areas. Those of us who like New Town Marina have worked on our own marina, done it all on a local basis, we need help too. There is a strain on our local law enforcement, fire and rescue department.

We have a good relationship with the local Corps staff. We always have had. But I am of firm belief that the local Corps of

Engineers should have a little more flexibility dealing with sparsely populated areas versus the urban areas. This has been a problem in the past. And I think will continue to be. Corps help dollars should be available like I said to marinas like the New Town Marina and not just certain maintained areas. We pay dues. And we have fund raising events to try to keep our marina available to the public on this lake. An effort must be made in the future to stabilize the lake level to a greater degree. I realize no one can control snowfall. It is obvious for several years that the snowfall is below normal. And it is going to be a problem. I think there has to be a change. It has got to be given serious studies what can be done to stabilize that lake. It is ironic we are looking for development of some kind to help support the economy in our communities. And one of the bright spots we did have was the lake. And now it is being more and more difficult to maintain what we have done there. And private capital is becoming almost impossible with the fluctuation of the lake.

Senator, that is my opinion.

Senator CONRAD. Thank you very much, Darold. Next we will hear from Loren Hoffman who is the Auditor of the City of Parshall. Welcome Loren. Thank you for joining us and please proceed with your testimony.

Mr. HOFFMAN. Senator, I have given your assistant a copy of my testimony if you wish to follow along as there are some graphs that might be helpful.

Senator CONRAD. Thank you, Loren.

STATEMENT OF LOREN HOFFMAN, CITY AUDITOR, PARSHALL, ND

Mr. HOFFMAN. Before beginning my testimony today, I feel that I should make clear that the intent of my testimony is only to show the loss of tax revenue to the City of Parshall due to HUD policies and federal statutes dealing with taxation of Indian properties. It is not a testimony to state that Native Americans are not welcome to live in the City of Parshall.

Today I will try to show how the population characteristics and the housing characteristics of Parshall have changed over the years. Enclosed you will find both population figures and housing figures from 1960 to 1980. These figures show a steady increase in the Indian population and also a steady increase in Indian households. It also shows that the Indian population by total percentage has doubled from 1970 to 1980. In the year 1970 the first HUD homes were built in Parshall. Since 1970 construction has continued until it has reached a total of 80 units in Parshall. These 80 units are 20 percent of the total housing units in Parshall per 1980 census.

The loss of tax revenue to the City of Parshall on these 80 units is estimated to be \$17,899.20 per year. This figure is derived from an estimated market value of \$40,000 per unit.

The governing board of the City of Parshall can derive a couple conclusions from the increased population of Indian people and the increase in HUD housing. It is apparent that Indian people in increasing numbers are choosing to live in Parshall and that HUD is

content to build and purchase housing for them. Although we are not sure in which order this is happening, we have no problem with either. However, the governing board of the City of Parshall feels that someone is forgetting one very important item, how does a local government supply services to extra housing units and people without any increase in tax revenue. Since all of our services are public they must be supplied, nondiscriminately, to every citizen of Parshall.

Therefore we ask that the Federal Government do the following: Make payments to the City of Parshall equal to normal taxation from the years 1970 to present. Make payments to the City of Parshall annually equal to normal taxation for existing and future HUD homes. Insure that funds for special assessment projects be set aside for future maintenance and development projects.

In conclusion, I feel that I must mention one other item that is of major concern to the City of Parshall. That is the water level in Lake Sakakawea. Since 1986 the City of Parshall has been using Lake Sakakawea as a water source. City engineers inform us that if the lake level reaches 1818 feet we will be out of water. Therefore, we request that you ask the Corps of Engineers to hold the lake level above 1818 feet. Or if this is not possible, assist us in obtaining funds to extend our water intake structure.

I might add, Senator, I know you are aware of our problem and that you are working on it. And we appreciate that. Perhaps this information will give you a little more ammunition as to what our problem is. In theory, Senator, we could have a complete community with HUD housing and no tax revenue to operate city government and services. If I could sum up my testimony that would be it.

[The prepared statement of Mr. Hoffman follows:]

City of Parshall

MAYOR
Wade Williamson, Jr.

Phone 862-3459

AUDITOR
Loren Hoffman

Parshall, N. Dakota
58770

ALDERMEN
James Huen
Sandy Felden
Ronald Julson
Walt Dwyer

August 25, 1989

Senator Kent Conrad
Public Hearing
Parshall
N.D.

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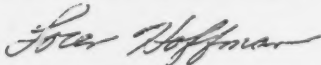
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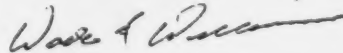
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Respectfully submitted,



Loren Hoffman
City Auditor

In concurrence, .



Wade Williamson, Jr.
Mayor

City of Parshal

Population

1920 -	376
1930 -	470
1940 -	570
1950 -	935
1960 -	1216
1970 -	1246
1980 -	1059

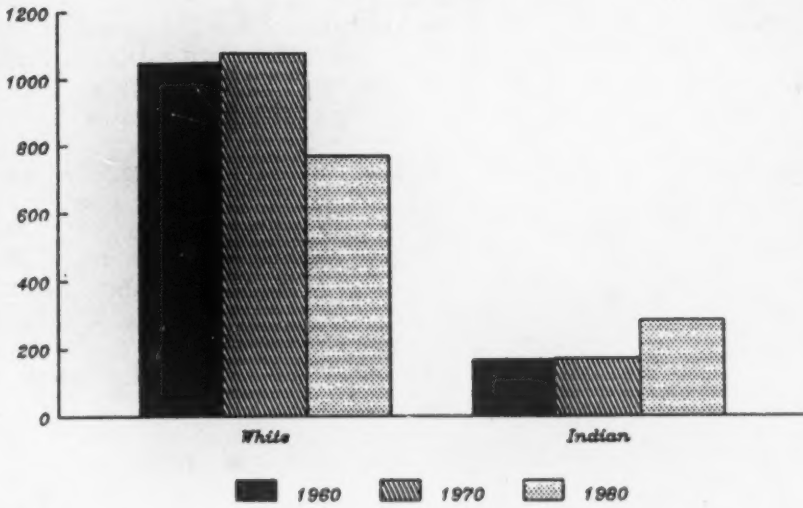
	Total Housing Units	Year Round Units	Occupied Housing Units	Owner Occupied Units	Renter Occupied Units
1970	437	436	410	215	195
1980	408	402	363	228	135

	Persons	White	Indian (percentage)
1960	1216	1048	167 (13.7)
1970	1246	1076	170 (13.6)
1980	1059	770	285 (26.9)

	Households Total	Non-White (percentage)
1960	344	29 (8.4)
1970	410	38 (9.2)
1980	363	71 (19.5)

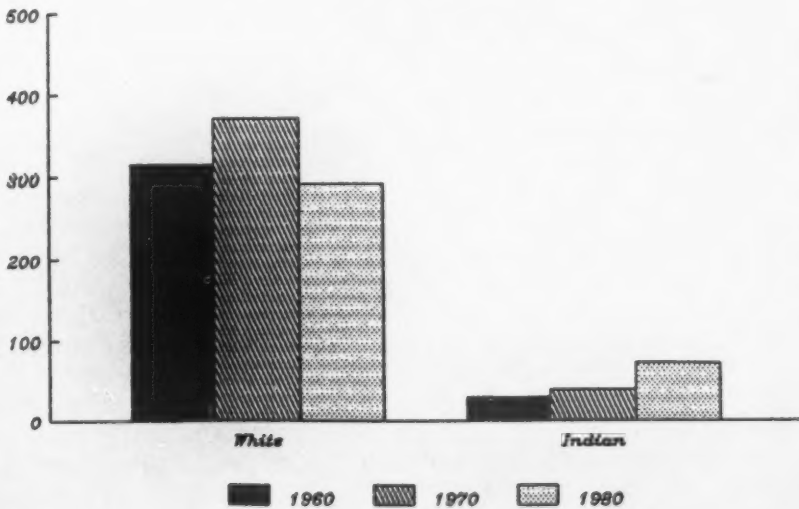
All figures are from the U.S. Census

City of Parshall Population



U.S. Census

City of Parshall Households



U.S. Census

Senator CONRAD. Thank you, Loren. I want to say to you that in my three years' experience as a United States Senator, I have never seen a problem that seems to be as difficult to get a solution to as the problem associated with HUD housing. HUD apparently has hundreds of thousands of dollars to pay consultants to do nothing more than make a couple of phone calls. Yet they can't get on track sufficiently to meet the obligation of the Federal Government when it puts housing in a community. There is not sufficient money to pay the legitimate costs associated with that housing. I think HUD has been as unresponsive and as irresponsible a federal agency as I have dealt with in these three years. It is time that they get on track. I have never seen such bureaucratic mishmash as we have gotten from HUD on the problems associated with Parshall. I must say to you that my patience is about run out with those people. You would not believe the number of excuses that we get from them as to why nothing can be done. As you know, earlier this year they gave us a clear assurance that this year the money was going to be forthcoming. The Denver office was absolutely clear that we were going to get that money. And then the decision went to Washington. All of a sudden they claim that they don't have any authority to do that, no legal authority. That is their latest excuse.

This year I have gone to the Appropriations Committee to try to get a special appropriation to pay those costs for this year. I am utterly frustrated with trying to get the bureaucracy and HUD to do what is its obvious responsibility. For the future we have concluded that the only way we are going to get the right result is to have a legislative change that requires the bureaucracy to meet this need. That is my intention. First to get an appropriation for this year, and, for the future, get a change that will require HUD to pay a subsidy in direct proportion to the reasonable cost associated with those units. That is a responsible solution. I hope that, at some point, HUD will awaken itself from its deep slumber and will be able to discharge its responsibilities appropriately.

Mr. HOFFMAN. I would ask, Senator, that you do your utmost to insure that those payments stay very close to normal taxation. As you are aware in a small tax base that we are in, 60 to 70 percent of parity in taxation will help our problem, but it will just postpone the end for us.

Senator CONRAD. Let me raise with you the larger issue: payment in lieu of taxes formulas. As you know payment in lieu of taxes formulas are running at about 59 percent of the formula. Senator Burdick and I this year offered two amendments. One that Senator Burdick offered in committee got that level of funding increased from 59 percent up to 87 percent. I then offered an amendment on the floor of the senate that will provide a 100 percent level of funding if there is an overage in revenues in some of our oil income funds. This year we could move from 59 percent level of funding to 100 percent for the first time in many years. We seem to have gotten some results that will be important to North Dakota.

But we have got a clear problem with respect to Parshall. I must say to the city fathers you have done an excellent job of keeping this at the forefront of our attention and have been working responsibly to get a solution. The citizens of your community ought

to know that we have heard from you many times. You have provided the evidence we needed. HUD told us without any reservations that this was going to be solved this year. And they once again went back on their word. At some point people have got to get fed up with a government that doesn't keep its word.

Let me ask you some questions. I think we need to make clear for the Record the question of reservoir water levels. Then we will come back to you if we can, Stanley. 1818 is the water level that is necessary to have that water intake effective for the City of Parrish, am I correct?

Mr. HOFFMAN. In the wintertime, Senator. We have to allow for our actual intake structure which is at 1812 and a half. Normally we have four feet of ice in the wintertime. Last spring our last physical measurement showed four feet of water; or four feet of ice and three feet of water. So if we are three feet below that we would just have ice. And that would gather around the intake structure and in the spring when the ice went everything else would too.

Senator CONRAD. So it is critical that the water be maintained at that level and, if possible, above it.

Mr. HOFFMAN. At least seven feet is very touchy. We had to shut down some of our pumps, slow them down I should say, last year we had some cavitation under the ice. It was starting to slow up. And if there is an extension required as you know it would be rather hard to do in January. So we are looking at November 1 possibly if it is found that we are not going to have water.

Senator CONRAD. I hope General Ryan is hearing this message as well. This is a very important matter.

How much did the city's intake cost?

Mr. HOFFMAN. The actual construction cost. I don't know exactly, a quarter of a million dollars. I am guessing. What we did, Senator, about three years ago we had a total revamping of our entire water system, water lines, water plant, and we run a line to the lake. And the cost on that was \$2.8 million.

Senator CONRAD. I recall a number close to \$3 million.

Mr. HOFFMAN. And it is working. We have good quality water. Our standby water is old wells with poor quality water.

Senator CONRAD. Very poor quality. I remember very well. We faced that issue back in the campaign time.

Stanley, you wanted to make a comment?

Mr. WRIGHT. Thank you, Senator. I know we have been going real heavy here on the nuts and bolts of our situation. And you touched on a little light subject. And I would like to, but I am such a poor story teller. But with regards to my last remarks I want to say this little story first.

These three persons had passed away. And it was about the time that they were going to be taken up yonder. So the first gentleman got to the Pearly Gates and St. Peter was there. And he said well there just one more little thing you got to go through before you get into Heaven. And oh my goodness what is that he said. Well he said there is a spelling test. Oh boy, he said I have always been a poor speller. St. Peter says it is quite simple. The word is God. Can you spell that? So he did, G-O-D.

And the second gentleman come up and went through the same test. And he passed too.

Now the third person come up. And this lady was a fine lady in her past. And she had been suffering all of her life in our land with equal rights and women's lib and everything. And she said why would I have to go through a spelling test now to get into Heaven. Well he said it is real simple. It is a very minor word to spell. Well she said what it is. And he said Czechoslovakia.

But Senator, some way or another I related us to that situation that we are kind of going through the test. And we need immediate attention. My comments some way that I can say it that would make sense to you is that tax revenue that I keep referring to, that the Federal Government could be paying to local governments. I don't want to let it be confused if we would get it or how we can handle it is to be confused that it is a grant or something like that manner. I think it is a substantial important subject that it is a tax that they own the property. What we rightfully have coming according to the Pick-Sloan Act and the 1976 Act. I feel that Congress recognized that they did have responsibility and when they passed that part of the law.

So my last remark would be again that it has got to be reviewed and retroactive.

Senator CONRAD. You have brought up an important point Stanley. We are not talking about a handout, we are talking about payment in lieu of taxes that would be paid if this land was held by private landowners.

Mr. WRIGHT. That is right. That is what we are all speaking about. We want to be responsible people. I want the county, the city, and the township governments to handle their road problems. We don't want to be bothering you with a plea that we need another \$3 million to do something. It is just basic business and very important.

Senator CONRAD. Do we have an estimate of what an average per acre tax would be on equivalent land. In other words, you indicated they are paying 75 cents an acre on some 60,000 acres. Of course, there is a question about the correct number of acres as well; I understand that. But on equivalent acreage, what would a private landowner be paying? Do you have an estimate of that?

Mr. WRIGHT. Yes, Senator. I commented about that, but maybe I didn't make myself very clear. I have a copy of some material that our Mountrail County Auditor prepared for me. And I will present this to you. That is really the only thing I have that is very important.

Senator CONRAD. What is the conclusion of that on a per acre basis? I recall you saying in your testimony \$2.50 an acre. Is that based on what the equivalent private landowner would pay?

Mr. WRIGHT. Yes. That is somewhat of an average. This breakdown that the auditor in Mountrail County has put together is on different lands of different values. And it varies from \$2.52 up to \$2.89, \$2.43. But these are some examples. And I know all of the 11 counties could get you that information. Maybe Mountrail County is even lower than other surrounding counties around the lake. So that information is there. Like there is two examples, or one example in each of the towns, New Town and Parshall. But that again is another subject. But that is in this information too.

Senator CONRAD. I appreciate your help on this point very much. We want to make sure we get that entered into the Record. I would like to ask Darold Peterson a question. Darold, you made a statement that you would like to see the Corps have more flexibility in sparsely populated areas. I think I know what you are talking about there, but maybe you could give us an example of what you are thinking of, because General Ryan is here. I have heard comments like that before from officials and business people and interested parties from around the lake. Maybe you could give us an example of what you are thinking of.

Mr. DAROLD PETERSON. If you are going to build a new boat ramp for example, it seems like the red tape goes on and on and on. And it takes weeks, months, whatever for this particular permit to be granted from maybe Omaha office or somewhere else. And it would seem to me that the people on the local level should have the authority.

Senator CONRAD. Let me just give you an example and see if this sounds like something you have heard of. I was with a gentleman in the last two days who told me a friend of his tried to get a permit from the Corps to put his boat near his cabin. He went to the Corps in the early spring in order to get the permit. They told him they weren't considering those, and couldn't get an answer to him until July 15. In the meantime the dropping lake level meant that he had to keep his boat in a place that was 45 minutes away. So if he wanted to bring his boat to his place he would drive the boat from the marina where he could keep his boat to his cabin. And then 45 minutes back. And then, of course, he had to drive back to his house. It was about a two hour proposition. And the Corps said they'd let him know July 15. Of course here the season is pretty well gone by July 15.

Mr. DAROLD PETERSON. There is any number of these type of problems that come up. And as I understand it anyway there is Corps policy. And it is more or less on a national level. I know we ran into this years ago on our lease renewals. And it just seems to me the people on the local level could have a little more authority in a lot of these areas and especially in the sparsely populated area like we have here in North Dakota.

Senator CONRAD. Thank you very much. Dale, you talked about the problem of meeting the match. I would like to discuss that a bit. Gene Sloan mentioned that, as well.

We placed in the Highway Authorization Bill a demonstration project that would have allowed the paving of some of the roads leading to the lake. That required an 80/20 federal-state-local match; 80 percent federal, 20 percent state and local. The highway department indicated they would provide one-half of the 20 percent, am I correct?

Mr. DAROLD PETERSON. Correct.

Senator CONRAD. That left a local requirement of 10 percent on a \$3 million project.

Mr. DAROLD PETERSON. That is correct, Senator.

Senator CONRAD. So that was \$300,000 that the local units would have been required to come up with in order to put the whole project together. How much can the local units put together?

Mr. DAROLD PETERSON. If we limit the project to grading and graveling we should be able to get by for some over \$100,000, \$150,000. And that is going to be tough to make that.

Senator CONRAD. If it were to be paved that would require \$300,000. And you are stretching to come up with \$100,000 to \$150,000?

Mr. DAROLD PETERSON. That is correct, Senator. Any addition over the \$150,000 if that is what it turns out to be would really work a hardship on the rest of the county. And I think those folks need to be considered in this too.

Senator CONRAD. Let me go to Gene Sloan. You were also mentioning the question of involvement with the Corps. I spent one weekend on the lake with people who are interested in its development. They said that they get the sense that the Corps has resisted development around the lake; that they see cabins as a nuisance, and aren't very interested in seeing development around the lake.

Could you give us some idea of what attitude you have seen exhibited by the Corps?

Mr. SLOAN. I think that is a pretty good evaluation of the situation over the years. I do see though as of late the Corps' attitude changing and it is positive. We do have a lot of areas that could be developed into cabin sites. And we have talked to the Corps about that. They have come out and spoke to various civic groups. And they have said that we don't want to go into competition with private owners of land. And of course there is some validity to that. But we also feel that there is some cop-out to that also. There is some prime Corps land that could be developed. We have a lot of people that would like to come out here, buy property and recreate and use our area which would all add to our economy. Yes, the Corps has been a problem. But I think they are starting to recognize it. And I see personally, and it is my observation that it has been improving the last year or so.

Senator CONRAD. Let me ask this question of any of the panelists. If the lake level were to drop an additional 10 feet from where it is now—what is the level currently?

Mr. HOFFMAN. 1824 approximately.

Senator CONRAD. 1824. Your intake is at what level?

Mr. HOFFMAN. 1812 and a half. When that was structurally put in we were within approximately 35, 40 feet of water in 1986. And we never could imagine we would have a problem.

Senator CONRAD. If the lake level were to drop another 10 feet from 1824 what would that mean? What are the implications of that?

Mr. DALE PETERSON. Terrible, Senator. We not only have the dust storms from the sandy beaches, but there is going to be a huge area that would be inaccessible as far as the fishing traffic is concerned. Or just to get out to the lake to enjoy it. There would be the dirt in your eyes. And we have seen that this summer.

If I have the time I would like to make one additional comment concerning the water. I have a friend that worked on a ranch on the west side of the river in the 1930's. And they finished their haying with the horse drawn mowers and so forth that they used in those days. On the west side. And the ranch foreman said now we are going to drive this equipment across the river and hay on

the north side. And he thought oh boy this is going to be a disaster in the making. But they crossed the river in the area of Mission Flats about half way between New Town and Williston, which is a bog valley, moors and reefs, and never got their feet wet.

Now I don't think that flew at that time similar to the times we are having now in the drought year and is equal to the 22,400 that is being released according to yesterday's paper. I think it must have been considerably less. I remember wading across that river three-fourths of the way and it wasn't more than a little better than half-way to my knees. And that was during the dry stretch in the 1940's. The 1930's were considerably worse.

Senator CONRAD. Do others want to comment? What does it mean to us if it drops 10 feet from here?

Mr. DAROLD PETERSON. Our New Town Marina, I do not believe would be usable with another 10 foot drop. We have approximately nine feet of water in our immediate bay right now. We may be able to with some Corps help, for example go out on some island and put in a temporary mesh ramp or something that would work for a year or two to get by until the water table comes back up.

Senator CONRAD. Any final comment?

Mr. HOFFMAN. I was going to make a statement, and you are aware of that, we would be out of water. An economic impact on our community would be tremendous to our main street. There are a lot of fishermen not nearly as many as there were because of the level presently. And I think we have some guide services and camping areas and lake rental units. And the impact would continue to flow down. And I am sure it would show up on our main street. And like I say for me we might be rather thirsty also.

Mr. SLOAN. The one thing it would do also is destroy what we have already built. We have people that used to go to Canada that now come here. A lot of them from Iowa, Minnesota, Montana, South Dakota, come up here fishing. We see fewer of those people coming up because it is hard to get in. If we drop another 10 feet it will render just about every ramp useless. And then we start losing the people to someplace else. And they are hard to get back. And I think that is a point that we have to make that we have a certain clientele coming in here. They are now starting to dwindle.

Senator CONRAD. Thank you. I thank all of the witnesses on this panel.

Mr. WRIGHT. Senator Conrad, I wanted to just ask a question. I can't see who is in here right now, Senator. But the county commissioners from all of these 11 counties were invited. In some way or another if you see proper that they would stand and be recognized. Or just they are present. And also I would like to ask if Senator Redlin is in the crowd? Is Senator Redlin here now?

Senator Meyer Kinnoin is he in the crowd now just stand up to be introduced?

Senator CONRAD. I would like to ask the county commissioners from the 11 counties here to stand. Thank you.

Mr. WRIGHT. And just a couple of more introductions if I may. I believe Representative June Enget, our representative from this district is in the crowd, is she not? I can't see. Is Representative Dick Solberg also in the crowd? He is the representative from this district.

Are there any other legislators in the crowd that would want to stand up? Thank you on our behalf too, Senator. We drilled one another quite hard to not carry over in time. So if there is people in the crowd who want to respond later I hope you can see that time possible.

Senator CONRAD. We will do our best to get that accomplished. In the interest of trying to get that accomplished we will cancel the coffee break that was scheduled. We will just keep going.

So I will call Ed Lone Fight, the Chairman of the Three Affiliated Tribes as our next witness. I thank this panel. We very much appreciated your participation.

Welcome, Ed. It's good to have you here. If the gentlemen who are with you would identify themselves, we will make sure that that is part of the Record as well.

Mr. LONE FIGHT. Thank you Senator. Before we get to our prepared statement I would like to express my appreciation on behalf of the Three Affiliated Tribes for the wonderful work you are doing for the Three Tribes and the entire State of North Dakota. Also like to express our appreciation to Tobyn Anderson and also Craig Obey. Give them our regards. They have assisted us in the past. And we look to more of the same in the future endeavors on the Fort Berthold Indian Reservation.

I would also like to welcome Tom Jensen to the Three Affiliated Tribes of the Fort Berthold Indian Reservation. I have talked to you on the phone. I never had the opportunity to meet you.

Before we begin with my prepared statement I would like to have the members of my panel here introduce themselves and maybe their titles or so.

Mr. MOSSETT. Jim Mossett, representative of east area, south segment.

Senator CONRAD. If you could spell your last name I think it would help the Reporter.

Mr. MOSSETT. M-O-S-S-E-T-T.

Senator CONRAD. Thank you very much.

Mr. HALL. My name is Titus Hall. I am a representative for the New Town area.

Mr. GILLETTE. Austin Gillette, tribal council member from White Shield.

Senator CONRAD. Can you spell that?

Mr. GILLETTE. It is like razor blade and Austin is like Texas.

Mr. SCHILL. Rich Schill, Natural Resource Department Administrator.

Senator CONRAD. Welcome all of you.

STATEMENT OF EDWARD LONE FIGHT, CHAIRMAN, THREE AFFILIATED TRIBES OF THE FORT BERTHOLD RESERVATION, ACCOMPANIED BY JIM MOSSETT, REPRESENTATIVE OF EAST AREA, SOUTH SEGMENT; TITUS HALL, REPRESENTATIVE FOR THE NEW TOWN AREA; AUSTIN GILLETTE, REPRESENTATIVE FROM WHITE SHIELD; AND RICH SCHILL, NATURAL RESOURCE DEPARTMENT ADMINISTRATOR

Mr. LONE FIGHT. Good morning Senator Conrad, ladies and gentleman. I am Edward Lone Fight, Tribal Chairman of the Three Af-

filiated Tribes. I appreciate the opportunity to provide testimony before the Subcommittee on Water and Power regarding the impact of the construction of Garrison Dam on the Fort Berthold Indian Reservation. I have several observations to make and recommendations to suggest on how the Federal Government can assist the Tribal Government and state and county governments in rebuilding the infrastructure of Fort Berthold and nearby counties. However, before I present the body of my testimony I feel it is incumbent upon me to remind the subcommittee of the recommendations made by the joint tribal advisory committee.

That committee commonly referred to as JTAC, identified and quantified the extent of the damage to the Three Affiliated Tribes as a result of the construction of Garrison Dam. The JTAC made their final report over three years ago. I am confident that you are familiar with the recommendations made by that report. I cannot over-emphasize how important it is to implement the recommendations made by JTAC. Myself and all the members of the Three Affiliated Tribes would sincerely appreciate whatever the assistance that the members of the subcommittee can provide to move forward on JTAC. The time for action is now. The tribes have realized that local governments and non-Indians residents were also impacted by the construction of the Dam and continued to be impacted by the reservoir today. The lack of bridges and an adequate road network makes transportation difficult and inhibits economic development for all people in the region. The loss of the access to river water and springs in the river bottom has forced most people to rely solely on ground water as a domestic supply. The ground water is typically of poor quality and compounds already prevalent health problems such as diabetes and hypertension. Roads and water are but two subjects I would like to discuss with the subcommittee today. I believe that the Federal Government can assist the tribes, state, and counties in mitigating some of the negative impact imposed upon us by the reservoir. I believe that federal assistance is also appropriate in such areas as solid waste and recreation.

The lack of quality roads on the reservation creates a plethora of problems for reservation residents and visitors. Because of poor roads and a lack of home access roads people can be isolated during times of inclement weather. Children miss school because the schoolbus cannot traverse the trail going to the home. Elderly rural residents who are frequently afflicted with numerous health problems experience difficulty when a medical emergency arises.

The tribes have expended time, effort, and money to develop recreation areas on the lake. However, because recreation areas are often literally at the end of the road it can be an experience in itself just to reach the area. These roads need to be improved so that the full recreational potential of the lake can be realized. The increased recreational traffic to these areas also increases the maintenance burden on main and arterial roads. As an aside to the issue of recreation the Congress should insure that tribes become eligible to receive funding through the land and water conservation fund to improve recreational opportunities on Fort Berthold.

I am particularly concerned about the roads administered by the Bureau of Indian Affairs. The Bureau has proposed a new funding

system referred to as relative needs. This system would further damage the transportation network on Fort Berthold. The proposed funding formulas do not take into consideration the needs for home access roads on Fort Berthold, nor do they take into consideration either street maintenance or bridge construction and maintenance. These items are important on Fort Berthold. The funding system should address them positively.

Some progress is being made with regard to the main and arterial roads that provide access to recreation areas. The tribes and the state have met and identified the problem, i.e. providing and maintaining adequate all-weather access to Lake Sakakawea. The tribes and the state agree that the roads into McKenzie Bay, Charging Eagle Bay, Skunk Creek, and Mahto Bay should all be improved. Through cooperation between the federal, state, and tribal governments these special projects can become reality. Funds should be appropriated to construct and maintain these roads and other roads which provide access to recreational areas.

Recommendation number seven of the JTAC Report address transportation issues and among other things calls for a bridge to be built. A bridge and improved transportation network would not only benefit the tribes but would improve the opportunity for more diversified economic development opportunities for all residents in the areas impacting the reservoir.

All the people residing in the area also share a common need for quality water. Both Lake Sakakawea and Lake Audubon have the potential to meet this need.

The tribes have been working with the Garrison Conservancy District and the Bureau of Reclamation to construct municipal, rural, and industrial projects on Fort Berthold. However, the amount authorized by the Garrison Diversion Unit Reformulation Act for Fort Berthold approximately \$8 million is nowhere near adequate to meet the need. The special plan formulation report developed by the Bureau of Reclamation identifies the needs more in the range of \$30 million to \$40 million.

The funding authorized by the reformulation for the state, municipal, and industrial program is also far from adequate. In light of this common need, the State Water Commission, the Conservancy District, and the Three Affiliated Tribes have elected to explore the possibilities of a regional water supply system. During the last year the tribes and the state jointly prepared a supplementary report to the Northwest Area Water Supply Study. This is called NAWS. Local rural water districts and communities have also been involved in this project. The NAWS supplement, completed this past spring, determined that shared facilities may indeed lower the costs of the providing water of acceptable quality and adequate supply to the residents of northwest North Dakota. This project would be similar to the mini Waconi Project authorized by the 101st Congress for South Dakota, known as the Lyman Jones Act.

The state and tribes are now initiating work on a study to determine the feasibility of constructing such a project. If the results of that study are favorable, and all of us are confident they will be, we would hope that Congress and the administration would view such a project favorably.

Another infrastructure problem which is shared by the reservation, counties, and local municipalities is the collection and disposal of solid waste. For too long America, particularly rural America, has taken this problem too lightly. The tribes began exploring alternatives for solid waste collection and disposal in 1985. A solid waste plan for Fort Berthold was prepared in 1986.

In 1987 and 1989 the tribes explored several different funding alternatives to implement the plan. The tribes were successful in obtaining a Community Development Block Grant and funding through Indian Health Service to develop a collection system and a sanitary land fill. However, because of changes mandated by Subtitle D of the Resource Conservation and Recovery Act, the funding we have secured is inadequate to meet the requirements to be imposed by the Environmental Protection Agency in the near future.

We have met with municipalities on and off the reservation. We all share this problem. After reviewing 16 alternative sites the tribes have allocated a tract of tribal land for a regional landfill. Final soil borings will be taken and ground water monitoring wells drilled late this month or early next month. Earth will be moved during September and implementation of the collection system will follow shortly thereafter. However, because of EPA's proposed 40 CFR Part 258 we and our neighbors are forced to change our plan.

We are now forced to implement costly regional transfer systems to move all solid waste to the regional site. This will increase our capital and operating costs over our projections. Public Law 86-121 provides authority for Congress to appropriate funds for Indian tribes to use a solid waste management. We would hope that Congress would favorably view such a proposal were it submitted.

In summary, it is time to implement JTAC. Congress should act on our proposed bill to establish an economic development fund for the Three Affiliated Tribes. Once this fund is established all residents in the area will benefit from the increased economic development which would result.

The Congress should also work with the administration to insure that adequate funding is provided for home access roads, residential streets, and special projects to improve and maintain access to recreational areas on Lake Sakakawea. Also in regard to recreation, Congress should pass the proposed American Heritage Trust Fund legislation so that Indian tribes have access to the Land and Water Conservation Fund. The improved recreational opportunities that follow will once again benefit the entire region.

In addition, the Federal Government has the opportunity to improve the quality of the environment on Fort Berthold and the surrounding area by appropriating funds for solid waste management utilizing the authority provided by Public Law 86-121.

Another opportunity will likely exist for the Congress to improve the quality of life in the region when the tribes and states joint proposal for a regional water system is submitted.

Let us all, Congress, the administration, tribes, state, and counties, work together to make Lake Sakakawea more of an asset than a liability. Thank you for your time and consideration.

I am open for questions.

[The prepared statement of Mr. Lone Fight follows:]

TESTIMONY
OF THE
THREE AFFILIATED TRIBES
OF THE
FORT BERTHOLD INDIAN RESERVATION

BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES
PARSHALL, NORTH DAKOTA
AUGUST 25, 1989

Good morning Senator Conrad, ladies, and gentlemen. I am Edward Lone Fight, Tribal Chairman of the Three Affiliated Tribes. I appreciate the opportunity to provide testimony before the Subcommittee on Water and Power regarding the impacts of the construction of Garrison Dam on the Fort Berthold Indian Reservation.

I have several observations to make and recommendations to suggest on how the federal government can assist the Tribal government and State and County governments in rebuilding the infrastructure of Fort Berthold and nearby counties. However,

before I present the body of my testimony, I feel it is incumbent upon me to remind the Subcommittee of the recommendations made by the Joint Tribal Advisory Committee.

That Committee, commonly referred to as JTAC, identified and quantified the extent of the damage to the Three Affiliated Tribes as a result of the construction of Garrison Dam. The JTAC made their final report over three years ago. I am confident that you are familiar with the recommendations made by that report. I cannot over emphasize how important it is to implement the recommendations made by JTAC. Myself, and all the members of the Three Affiliated Tribes, would sincerely appreciate whatever the assistance that the members of the Subcommittee can provide to move forward on JTAC. The time for action is now.

The Tribes also realize that local governments and non-Indians residents were also impacted by the construction of the Dam and continue to be impacted by the Reservoir today. The lack of bridges and an adequate road network makes transportation difficult and inhibits economic development for all people in the region. The loss of the access to river water and springs in the river bottom has forced most people to rely solely on ground water as a domestic supply. The ground water is typically of poor quality and compounds already prevalent health problems such as hypertension.

Roads and water are but two subjects I would like to discuss with the Subcommittee today. I believe that the Federal government can assist the Tribes, State, and Counties in mitigating some of the negative impacts imposed upon us by the Reservoir. I believe that Federal assistance is also appropriate in such areas as solid waste and recreation.

The lack of quality roads on the Reservation creates a plethora of problems for Reservation residents and visitors. Because of poor roads, and a lack of home access roads, people can be isolated during times of inclement weather. Children miss school because the school bus cannot traverse the trail going to the home. Elderly rural residents, who are frequently afflicted with numerous health problems, experience difficulty when a medical emergency arises.

The Tribes have expended time, effort, and money to develop recreation areas on the Lake. However, because recreation areas are often, literally, at the end of road it can be an experience in itself just to reach the area. These roads need to be improved so that the full recreational potential of the Lake can be realized. The increased recreational traffic to these areas also increases the maintenance burden on main and arterial roads. As an aside to the issue of recreation, the Congress

should insure that Tribes become eligible to receive funding through the Land and Water Conservation Fund to improve recreational opportunities on Fort Berthold.

I am particularly concerned about the roads administered by the Bureau of Indian Affairs. The Bureau has proposed a new funding system referred to as "Relative Needs". This system would further damage the transportation network on Fort Berthold. The proposed funding formulas do not take into consideration the need for home access roads on Fort Berthold, nor do they take into consideration either street maintenance or bridge construction and maintenance. These items are important on Fort Berthold. The funding system should address them positively.

Some progress is being made with regard to the main and arterial roads that provide access to recreation areas. The Tribes and the State have met and identified the problem, i.e., providing and maintaining adequate all weather access to Lake Sakakawea. The Tribes and the State agree that the roads into McKenzie Bay, Charging Eagle Bay, Skunk Creek, and Mahto Bay should all be improved. Through cooperation between the Federal, State, and Tribal governments, these special projects can become reality. Funds should be appropriated to construct and maintain these roads and other roads which provide access to recreation areas.

Recommendation number seven of the JTAC report addresses transportation issues and among other things calls for a bridge to be built. A bridge and improved transportation network would not only benefit the Tribes but would improve the opportunity for more diversified economic development opportunities for all residents in the areas impacted by the Reservoir.

All the people residing in the area also share a common need for quality water. Both Lake Sakakawea and Lake Audubon have the potential to meet this need.

The Tribes have been working with the Garrison Conservancy District and the Bureau of Reclamation to construct Municipal, Rural, and Industrial (MR&I) projects on Fort Berthold. However, the amount authorized by the Garrison Diversion Unit Reformulation Act for Fort Berthold, approximately \$8,000,000, is nowhere near adequate to meet the need. The Special Plan Formulation Report developed by the Bureau of Reclamation identifies the needs more in the range of \$30,000,000 to \$40,000,000.

The funding authorized by the Reformulation Act for the State MR&I program is also far from adequate. In light of this common need, the State Water Commission, the Conservancy District, and the Three Affiliated Tribes have elected to explore the possibilities of a regional water supply system. During the last

year the Tribes and the State jointly prepared a supplementary report to the Northwest Area Water Supply Study (NAWS). Local rural water districts and communities have also been involved in this project. The NAWS supplement, completed this past spring, determined that shared facilities may indeed lower the costs of the providing water of acceptable quality in adequate supply to the residents of northwest North Dakota. This project would be similar to the Mini Waconi project authorized by the 101st Congress for South Dakota.

The State and Tribes are now initiating work on a study to determine the feasibility of constructing such a project. If the results of that study are favorable, and all of us are confident they will be, we would hope that Congress and the Administration would view such a project favorably.

Another infrastructure problem which is shared by the Reservation, counties, and local municipalities is the collection and disposal of solid waste. For too long America, particularly rural America, has taken has taken this problem too lightly. The Tribes began exploring alternatives for solid waste collection and disposal in 1985. A solid waste plan for Fort Berthold was prepared in 1986.

In 1987 and 1988 the Tribes explored several different funding alternatives to implement the plan. The Tribes were successful in obtaining a Community Development Block Grant and funding through Indian Health Service to develop a collection system and a sanitary landfill. However, because of changes mandated by Subtitle D of the Resource Conservation and Recovery Act, RCRA, the funding we have secured is inadequate to meet the requirements to be imposed by the Environmental Protection Agency, EPA, in the near future.

We have met with municipalities on and off the Reservation. We all share this problem. After reviewing sixteen alternative sites, the Tribes have allocated a tract of Tribal land for a regional landfill. Final soil borings will be taken and ground water monitoring wells drilled late this month or early next month. Earth will be moved during September and implementation of the collection system will follow shortly thereafter. However, because of EPA's proposed 40 CFR Part 258 we, and our neighbors, are forced to change our plans.

We are now forced to implement costly regional transfer systems to move all solid waste to the regional site. This will increase our capital and operating costs over our projections. Public law 86-121 provides authority for Congress to appropriate funds for

Indian Tribes to use for solid waste management. We would hope that Congress would favorably view such a proposal were it submitted.

In summary, it is time to implement JTAC. Congress should act on our proposed bill to establish an economic development fund for the Three Affiliated Tribes. Once this fund is established all residents in the area will benefit from the increased economic development which would result.

The Congress should also work with the Administration to insure that adequate funding is provided for home access roads, residential streets, and special projects to improve and maintain access to recreational areas on Lake Sakakawea. Also in regard to recreation, Congress should pass the proposed American Heritage Trust Fund legislation so that Indian tribes have access to the Land and Water Conservation Fund. The improved recreational opportunities that follow will, once again, benefit the entire region.

In addition, the Federal government has the opportunity to improve the quality of the environment on Fort Berthold, and the surrounding area, by appropriating funds for solid waste management utilizing the authority provided by P.L. 86-121.

Another opportunity will likely exist for the Congress to improve the quality of life in the region when the Tribes and States joint proposal for a regional water system is submitted.

Let us all, Congress, the Administration, Tribes, State, and counties, work together to make Lake Sakakawea more of an asset than a liability. Thank you very much for your time and consideration.

Senator CONRAD. Thank you very much, Ed, we appreciate that testimony.

Let me first turn to the question I asked the previous panel, because I think it is important we explore the question of water levels on the lake. From your perspective, what would an additional 10 foot drop in the lake level mean?

Mr. LONE FIGHT. I will turn this question over to Rich Schill. Before I do that let me for the Record say that we have a long record of working with the COE, Army Corps of Engineers. And the record is voluminous, it speaks of taking land resources from the Three Affiliated Tribes. It speaks of how the tribes have asserted themselves to either maintain or get some of the resources back. But it is my opinion that the Army Corps of Engineers are so powerful that you as a Senator I don't know if you can control them or the President of the U.S. It is my experience that they will play politics. We have seen this. They put a spread in the Bismarck Tribune, an editorial type where they stated that they make opinions their solicitor about any matters. They said that the Fort Berthold Reservation was diminished when in fact it has never been diminished by Congress in the 1944 Act. And similar types of activity. And we have met with the Omaha district. And we have gone beyond the Omaha district. We convened a meeting with Washington, D.C. at the COE headquarters office. And I just maintain that if they don't want to do something they won't do it no matter if the President of the U.S. is directing them. That is just my opinion. And I have some strong feelings on that. And I think they will do whatever they want to do.

Mr. SCHILL. If lake waters are lowered 10 feet there will be a variety of problems for the tribes. As you are well aware tribal members graze livestock on the lands adjacent to the lake. Already we see problems there from fences having to be extended, the sediments that are deposited in the lake are mud. A cow will go down out in the mud and get bogged down and are lost. Most of these ranchers are already suffering extreme economic hardship already and the loss of additional cattle won't help them at all.

The tribes have two water intakes for communities in the lake. They are somewhat lower, 10 feet won't imperil their operation. But 20 feet will. Boat ramps and recreation areas would be severely impacted by another 10 foot drop. We at tribal expense extended the boat ramps at Pouch Bay 85 feet this year.

Senator CONRAD. What was the cost of that, do you recall?

Mr. SCHILL. We supplied the labor and the concessioner down there did a lot of work. And we managed to keep it pretty reasonable. We used funds from our tribal conservation permit sale to purchase the concrete which was about \$1,300.

Senator CONRAD. Was that donated labor?

Mr. SCHILL. Right. So it is hard to put a real price tag on it. But right now the end of the boat ramp is out of the water. And we have steel mesh out into the water.

Senator CONRAD. Even with the extension that you made, the ramp is out of the water?

Mr. SCHILL. The concrete is out of the water now. I don't know how many people want to go to a recreation that is that far away

from the lake itself. So there will be quite a few impacts if the lake drops another 10 feet.

Senator CONRAD. Ed, let me go back to the point you made about solid waste. I would be very interested to know what additional costs are associated with these changes from EPA?

Mr. LONE FIGHT. I will have to have Rich answer this also.

Mr. SCHILL. Well if 40 CFR Part 258 is indeed implemented which it looks like it will be, we will not be able to use any trench type landfills in the communities to dispose of bulky waste. If you bury any waste in the ground in the near future you will have to have elaborate liners, ground water monitoring wells, and a protocol sampling that would easily make each of those sites cost upwards of \$100,000. So instead of that we will have to put in what we refer to as transfer stations and have bulky waste go into large 35 cubic yard dumpsters here and transport that to our centralized landfill which will fit those criteria. So we are looking at roughly an additional \$300,000 to \$400,000 to meet those regulations.

Senator CONRAD. Is that a one-time cost or an additional operating cost?

Mr. SCHILL. There will be some increased operating cost from transporting the waste from, for example, Twin Butte which is roughly 90 miles from our landfill site. White Shield is close to 70 miles. And if you look at the cost of roughly 50 cents per mile to transport that waste that increases the cost of operation also.

Senator CONRAD. Thank you very much for that answer.

Ed, you mentioned in your testimony that one of the recommendations of the JTAC—which I want to indicate was a finding of a panel that was convened by the Reagan Administration—was that a bridge ought to be constructed. Can you tell us the location of that bridge and the estimated cost?

Mr. LONE FIGHT. I believe we will provide the additional information at a later date. I think we still have that opportunity.

Senator CONRAD. The Hearing Record is open for two weeks.

Mr. LONE FIGHT. And I will provide the answer to that question at a later time. There are several sites we are looking at. And once we get a full agreement with the state there is one site that has already had the borings test and the impact test. But we are looking at several sites at this time.

Senator CONRAD. So there has been no predetermined site?

Mr. LONE FIGHT. No, no predetermined site at this time.

Senator CONRAD. The fourth question that I have concerns the JTAC recommendations themselves. What amount of additional compensation did JTAC believe was required to fulfill the original obligations and commitments of the Federal Government?

Mr. LONE FIGHT. I believe a just compensation or as the assistant secretary called it equity amount on the bottom side was \$178.4 million to a top side of about \$400 million as a just compensation for the Three Affiliated Tribes for a loss of 156,000 acres of prime bottom land, all of the trees and all of the other resources and coal deposits that were lost as just one part of it. And the other part of course all the infrastructure items such as the hospital which was to be replaced, has not been replaced yet. And a boarding school that was also there. And the road we are talking about the infrastructure also. And those have not been replaced either.

Senator CONRAD. I think that is useful information. Thank you very much. In order to be even close to staying on schedule, we are going to have to go to our next witness. And I want to thank all of you very much.

Mr. GILLETTE. We are going to have time to raise questions from the floor, right?

Senator CONRAD. I hope we are able to.

Mr. GILLETTE. Or do we have to go to D.C. to present it?

Senator CONRAD. Next we will hear from Dennis Hill, the General Manager of the North Dakota Association of Rural Electric Cooperatives of Mandan, North Dakota.

Welcome Dennis. Good to have you here. Please proceed.

STATEMENT OF DENNIS HILL, GENERAL MANAGER, NORTH DAKOTA ASSOCIATION OF RURAL ELECTRIC COOPERATIVES, MANDAN, ND

Mr. HILL. It is a pleasure to be here Senator Conrad and the members of the committee staff, Tobyn and Tom.

Senator Conrad, I first extend the thanks of the membership of the North Dakota Association of Rural Electric Cooperatives for your leadership in holding this important Hearing. Your insistence on bringing this proceeding to Parshall, North Dakota again shows your commitment to the people of this region and state to make some things happen. The subject we are discussing today, the loss of infrastructure caused by the impoundment of water behind Garrison Dam and Oahe Dam has long needed further study by the Federal Government. So again we thank you for providing the leadership to bring this issue to the attention of your committee chairmen and the rest of the Senate.

For the record my name is Dennis Hill. I am the Executive Vice President and General Manager of the North Dakota Association of Rural Electric Cooperatives headquartered in Mandan, North Dakota. The members of the association I represent provide electric service to some 76,000 rural North Dakotans over some 130,000 miles of electric line. In addition to the 20 distribution cooperatives who are members of our association we have six generation and transmission cooperative members.

From the standpoint of infrastructure the impacts created by the Garrison and Oahe Dams on the rural electric cooperatives has been a two-sided coin. Early in the development of cooperatives and the dams we did suffer some infrastructure losses when More-Gran-Sou Electric Cooperative headquartered in Flasher, for example, reports it spent some \$51,000 to relocate, install, and retire line that was inundated by water. It has no record of being paid for such work by the Corps of Engineers.

McKenzie Electric reports it had to take out some 15 miles of line at a cost of some \$60,000 when the work was done in the 1960's. It since has built some 15 miles of line to serve loads around the lake at a cost of some \$120,000.

The other cooperatives who serve around the lake, McLean Electric headquartered in Garrison, Mountrail Electric, headquartered in Stanley, and Oliver Mercer Electric development of cooperatives and the dams we did suffer some infrastructure losses when More-

Gran-Sou Electric Cooperative headquartered in Flasher, for example, reports it spent some \$51,000 to relocate, install, and retire line that was inundated by water. It has no record of being paid for such work by the Corps of Engineers.

The local rural electric cooperatives have never demanded payment for such work, because the other side of the coin is this. The local rural electric cooperatives while they may have lost some load and incurred some costs when the dams were filling have since gained some new loads. Each of the parks and recreation facilities, cabin sites, and campgrounds around the lake are served by a rural electric cooperative.

Of bigger concern to the rural electric cooperatives than lost infrastructure is what one might call a philosophical question. And that is what role does hydroelectric power revenues in paying for lost infrastructure? We in the rural electric program have always maintained that hydro-power revenues should not pay for loss or replacement of infrastructure and appear before you today, Senator Conrad, to reinforce that view.

When the dams were created it was agreed that hydro-power revenues would pay for the cost of building the hydro-power facilities, certain irrigation features and yearly maintenance and operations costs. It was agreed at the time of construction that hydro revenues would not be responsible for the original taking of lands, loss of roads, and other such infrastructure.

While we are certainly sympathetic to the concerns you are hearing about today and voice no support nor opposition to such claims we again ask that the Senate or the Congress not use hydro-power revenues for purposes they were never intended.

Hydro-power purchases by rural electric cooperatives are a key component for rate competitiveness and rate stability for our consumers. Rural electric cooperative consumers buy from one-fourth to a half of the electricity they sell to their members from the Western Area Power Administration at rates that average just less than a penny per kilowatt hour. Rural electric cooperatives depend heavily on this power, because of the demographics we face. We serve 1.6 consumers per mile of line, only have revenues of some \$2,500 per mile. And have to invest nearly \$14,000 per mile of line in plant to serve these loads. Without this hydro-power resource it would be nearly impossible for us to be anywhere near rate competitive if we had to buy all of our power from coal fired sources at costs that are some four times greater than hydro-power purchases.

In addition to this economic argument it seems fairer to us to ask the entire nation to share in the reimbursement for lost infrastructure. If the Congress were to ask just the users of hydro-power from the Pick-Sloan project to pay for lost infrastructure through higher hydro-power rates then those who suffer the losses would also be paying their own compensation. For these reasons we strongly encourage the Senate to look at federal appropriations as the source of funds for any compensation.

We trust these comments will be of help to you, Senator Conrad, and to the other members of the committee. Please feel free to call upon us at any time if you would like more information.

With that that would be our testimony for the Record.

[The prepared statement of Mr. Hill follows:]

**Testimony before the
Subcommittee on Water and Power**

**Senate Energy & Natural Resources Committee
at 9:30 a.m., Friday, Aug. 25, at the
Parshall Legion Hall
Honorable Bill Bradley, Chairman
Honorable Kent Conrad, vice-chairman, presiding**

Senator Conrad, I first extend the thanks of the membership of the North Dakota Association of RECs for your leadership in holding this important hearing. Your insistence on bringing this proceeding to Parshall, North Dakota, again shows your commitment to the people of this region and state to make things happen. The subject we're discussing today--the loss of infrastructure caused by the impoundment of water behind Garrison Dam and Oahe Dam--has long needed further study by the federal government. So again, we thank you for providing the leadership to bring this issue to the attention of your committee chairman and the rest of the Senate.

For the record, my name is Dennis Hill. I'm the executive vice president and general manager of the North Dakota Association of Rural Electric Cooperatives, headquartered in Mandan, N.D. The members of the association I represent provide electric service to some 76,000 rural North Dakotans over some 130,000 miles of electric line. In addition to the 20 distribution cooperatives who are members of our association, we have six generation and transmission cooperative members.

From the standpoint of infrastructure, the impacts created by the Garrison and Oahe Dams on the RECs has been a two-sided coin. Early in the development of cooperatives and the dams, we did suffer some infrastructure losses. Mor-Gran-Sou Electric Cooperative, headquartered in Flasher, for

example, reports it spent some \$51,000 to relocate, install and retire line that was inundated by water. It has no record of being paid for such work by the Corps of Engineers.

McKenzie Electric reports it had to take out some 15 miles of line, at a cost of some \$60,000 when the work was done in the 1960s. It since has built some 15 miles of line to serve loads around the lake at a cost of some \$120,000.

The other cooperatives who serve around the lake--McLean Electric, headquartered in Garrison, Mountrail Electric, headquartered in Stanley, and Oliver Mercer Electric headquartered in Hazen, report similar stories, although were not able to provide any documentation on the costs involved or how they were reimbursed.

The local RECs have never demanded payment for such work, because the other side of the coin is this: The local RECs, while they may have lost some load and incurred some costs when the dams were filling, have since gained some new loads. Each of the parks and recreation facilities, cabin sites and campgrounds around the lake are served by a rural electric cooperative.

Of bigger concern to the RECs than lost infrastructure is what one might call a philosophical question. And that is, what role does hydroelectric power revenues have in paying for lost infrastructure? We in the rural electric program have always maintained that hydro power revenues should not pay for loss or replacement of infrastructure and appear before you today, Sen. Conrad, to reinforce that view.

When the dams were created, it was agreed that hydro power revenues would pay for the cost of building the hydro power facilities, certain irrigation features and yearly maintenance and operations costs. It was agreed at the time of construction that hydro revenues would not be responsible for the

original taking of lands, loss of roads and other such infrastructure.

While we are certainly sympathetic to the concerns you're hearing about today--and voice no support nor opposition to such claims--we again ask that the Senate or the Congress not use hydro power revenues for purposes they were never intended. Here's why:

Hydro power purchases by RECs are a key component for rate competitiveness and rate stability for our consumers. REC consumers buy from a fourth to a half of the electricity they sell to their members from the Western Area Power Administration at rates that average just less than a penny per kilowatt hour. RECs depend heavily on this power because of the demographics we face; we serve 1.6 consumers per mile of line, only have revenues of some \$2,500 per mile, and have to invest nearly \$14,000 per mile of line in plant to serve these loads. Without this hydro power resource, it would be nearly impossible for us to be anywhere near rate competitive if we had to buy all of our power from coal-fired sources--at costs that are some four times greater than hydro power purchases.

In addition to this economic argument, it seems fairer to us to ask the entire nation to share in the reimbursement for lost infrastructure. If the Congress were to ask just the users of hydro power from the Pick Sloan Project to pay for lost infrastructure through higher hydro power rates, then those who suffered the losses would also be paying their own compensation. For these reasons, we strongly encourage the Senate to look at federal appropriations as the source of funds for any compensation.

We trust these comments will be of help to you, Senator Conrad, and to the other members of the committee. Please feel free to call upon us at anytime if you'd like more information.

Senator CONRAD. Thank you very much. We appreciate you taking the time to testify and provide constructive testimony that we will use as we deliberate on these issues.

There are three sets of issues that I think are emerging here today. One is the whole question of infrastructure impacts from Garrison. We heard from the commissioners, local officials on that question.

The second question is a water level question which is becoming more acute, more serious with lots of implications for everyone in the area.

And the third is the whole question of the JTAC recommendation and how those provisions will be implemented. That is a very difficult issue we have been struggling with for two years. There have been extensive negotiations between the parties. It is clear we do not yet have resolutions on the question of how those recommendations should be implemented and financed. There will be other meetings at which we discuss that. It is, nevertheless, very valuable to have this matter included as part of the Record here.

Let me turn to the two other items on which it would be useful to have the rural electric community's views. No economic entity has more involvement with the 11 counties that surround this lake than do the rural electrics. Lake levels become a very important issue to them.

Could you give us the rural electrics' opinion on what will happen if lake levels decline from where they are now?

Mr. HILL. Our association has not as a resolution per se that the members have voted on for an official position. The sense of myself, and I think our board of directors, is that deep concern about lake levels for two reasons. Obviously the hydro-power that we buy from the lakes is generated by water. If we reach a certain level, and I am not sure what the number is, I have heard it is around 1775. I don't know if it is lower or higher necessarily. But we reach a certain point where the water becomes so low that we cannot generate hydroelectricity at a reasonable or efficient manner. And therefore we lose a very important resource.

The other side of that coin is the rural electrics as I pointed out in my testimony provide all of the power that goes to the recreational development around Lake Sakakawea. Those are important customers of ours. They are important loads of ours. And we are very concerned that this industry doesn't diminish and go away. Our big concern is that we need to have the entire State of North Dakota understand both sides of the issue. It is difficult for us to stand in front, I use the example of a dairy farmer in Strasburg and say your electric rates are going up so people in Bismarck can go fishing. It is difficult for them to understand that, because they are struggling to pay the bills on the farm. And their reaction is my gosh it is more important that I make a living than you go fishing. On the other hand as I pointed out it is an important load. It is an important industry. And so we just want to make sure that all sides are protected to the best of their ability. And we want to know some of the more clear economic trade-offs I guess that are involved before we say strongly one way or the other.

Senator CONRAD. The other issues that I wanted a chance for you to react to is the question of the infrastructure needs of these local

communities. We have had very clear testimony here today on infrastructure needs. Have the rural electric taken a position—apart from your position on funding for the JTAC recommendation—on infrastructure needs of these local communities?

Mr. HILL. Again, we have no official resolution on which to stand there. I think again the feeling would be one of certainly sympathetic to the claims we are hearing from all sides that we understand the great losses that have taken place out here. And from the other standpoint if this area is to grow and prosper we need that infrastructure replaced. If we are going to have rural development, economic development, which I know you are taking a key lead in in the Senate, we need to have this as a starting point. And if this cannot be replaced or is lost forever it is going to be very difficult as others have said to bring the people back into this region.

Senator CONRAD. Thank you very much, Dennis. We appreciate your testimony and the active involvement of the rural electric across the state.

Next we will turn to the Federal Government representatives, Mr. Roger Patterson, Regional Director of the U.S. Bureau of Reclamation from Billings, Montana. And Brigadier General Robert Ryan, the Division Engineer for U.S. Army Corps of Engineers, Missouri River Division.

Welcome. Good to have you here. General Ryan, I wish you had been with me yesterday in Belfield, North Dakota when I had a man say to me: "Senator, is the Army Corps of Engineers really more powerful than the entire Congress?" I assured him that that wasn't the case. I hope we are able to demonstrate that here today. Thank you very much for coming.

First we will hear from Roger Patterson, Regional Director of the Bureau of Reclamation. Welcome, Roger, please proceed with your testimony.

STATEMENT OF ROGER K. PATTERSON, DIRECTOR, GREAT PLAINS REGION, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY NEIL STESSMAN, PROJECT MANAGER, AND JACK G. BEYERS, ASSISTANT PROJECT MANAGER

Mr. PATTERSON. It is a pleasure for me to be here and for me to represent the Bureau of Reclamation here today. I have a couple of people from the Bureau of Reclamation in our Bismarck office. Immediately to my left is Neil Stessman. Neil is the project manager in Bismarck. And to his left is Jack Beyers. And Jack is our assistant project manager in Bismarck.

Senator CONRAD. Welcome, to both of you.

Mr. PATTERSON. Senator, as you know the Bureau of Reclamations principle activity in North Dakota is the construction of the Garrison Dam unit which we have under way. The Garrison Diversion Unit would serve a number of purposes that would benefit the State of North Dakota if completed. The Bureau of Reclamation has worked closely with state and local governments and landowners to resolve problems which have inevitably arisen during con-

struction of this large project. However, we are open to any suggestions on how we can improve our operations.

What I would like to do is briefly describe how the Garrison Project can assist the state and local communities in meeting their contemporary needs and the water supply, irrigation, recreation, and wild life enhancement areas.

As you know, many rural areas of North Dakota suffer from inadequate or poor quality water supplies. The Garrison Diversion Unit includes three major municipal, rural, and industrial water programs. The programs involve the municipal, rural and industrial development cost share program for the State of North Dakota, water systems for the Fort Berthold, Fort Totten and Standing Rock Indian Reservations, and the Sheyenne River water supply and release facilities.

The total cost of these systems will be about \$330 million. And approximately 55 percent of the total population of North Dakota will benefit from the availability of good quality drinking water. Since execution of the 1976 cooperative agreement with the State of North Dakota 31 projects with a total of \$161 million have been approved.

The authorized Garrison project also provides for increased agriculture production through irrigation of 130,940 acres of land. Irrigation developed to date has been limited to the Oakes Test Area which was conducted as an advance feature of the Garrison Diversion Unit to serve as a prototype irrigation test area.

Of particular interest in the local area is the Northwest Area Water Supply Project. Reclamation participated in funding 75 percent of the project study that identified the needs and interests in developing a water supply system. The nearby New Town transmission project has been approved for construction. Contract award is currently taking place and the project will be completed by this fall. The project consists of the installation of new pipe from the water treatment plant to a new storage reservoir.

Recreation is another feature of Garrison Diversion which would provide benefits to North Dakota. Under the recreation plan developed by the State Parks and Recreation Department two new recreation areas would be developed and facilities will be improved at 16 existing areas. More than 130 miles of canoe routes would be developed on the Missouri, James, and Sheyenne Rivers.

To date, the Brekken-Holmes Recreation Area has been completed and work is under way on the Devils Lake State Park system. Completion of this plan would increase the quality and quantity of recreation opportunities available to the public in North Dakota.

Reclamation is continuing to work closely with landowners on all land acquisitions needed for project development as well as wildlife mitigation and enhancement acreage. About 52,000 acres of land have been acquired and are being developed for wildlife purposes.

Mr. Chairman, I believe that concludes my formal statement. Both my colleagues and I would be happy to answer any questions at the appropriate time concerning the Bureau's involvement and activity in North Dakota.

[The prepared statement of Mr. Patterson follows:]

STATEMENT OF ROGER K. PATTERSON
REGIONAL DIRECTOR, GREAT PLAINS REGION,
BUREAU OF RECLAMATION,
AT THE FIELD HEARING ON IMPACTS OF THE GARRISON WATER PROJECT
UPON THE INFRASTRUCTURE OF THE AREA NEAR LAKE SAKAKAWEA,
BEFORE THE SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
UNITED STATES SENATE

PARSHALL, NORTH DAKOTA
August 25, 1989

Senator Conrad, I appreciate the opportunity to represent the Bureau of Reclamation here today. The Garrison Diversion Unit would serve a number of purposes that would benefit the State of North Dakota if completed. The Bureau of Reclamation has worked closely with state and local governments and landowners to resolve problems which have inevitably arisen during construction of this large project. We are open to any suggestions, however, on how we can improve our operations.

Many rural areas of North Dakota suffer from inadequate or poor quality water supplies. The authorized Garrison Diversion Unit includes three major municipal, rural, and industrial (MR&I) water programs. The programs involve the MR&I water development cost-share program for the State of North Dakota; water systems for the Fort Berthold, Fort Totten and Standing Rock Indian Reservations, and the Sheyenne River water supply and release feature.

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Reclamation is continuing to work closely with landowners on all land acquisitions needed for project development, as well as wildlife mitigation

and enhancement acreage. About 52,900 acres of land have been acquired and are being developed for wildlife purposes.

That concludes my statement. I will be pleased to respond to any questions.

Senator CONRAD. We will turn now to General Ryan and your testimony and then have a chance for questions for both. Welcome General Ryan.

STATEMENT OF BRIG. GEN. ROBERT H. RYAN, U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER DIVISION, ACCOMPANIED BY JOHN P. ELMORE, CHIEF OF OPERATIONS, CONSTRUCTION AND READINESS DIVISION; AND COL. DONALD E. HAZEN, DISTRICT ENGINEER, OMAHA DISTRICT

General RYAN. Mr. Chairman and members of the subcommittee, I am Brigadier General Robert H. Ryan, Division Engineer of the Missouri River Division, U.S. Army Corps of Engineers. Accompanying me are John P. Elmore, Chief of Operations, Construction and Readiness Division in our Corps headquarters in Washington, and Colonel Donald E. Hazen, District Engineer, Omaha District. We are pleased to appear today on behalf of the Assistant Secretary of the Army for Civil Works to discuss some of the impacts of the construction and operation of the Garrison Dam and Lake Sakakawea.

The Garrison Project was authorized by Congress in the Flood Control Act of 1944. Construction was initiated in 1946 and continued into the early 1950's. Total construction cost for the project was \$300 million. The project has a total storage capacity of 24 million acre feet of water. Project lands total 489,000 acres. The reservoir is one of a system of six mainstem reservoirs on the Missouri River that serves a number of purposes, including flood control, navigation, hydro-power, irrigation, recreation, fish and wildlife, municipal and industrial water supply, and water quality.

Lake Sakakawea's share of the flood control benefits provided by the system total nearly \$850 million through 1988. In North Dakota the annual flood damages prevented by the Garrison Dam are about \$700,000.

The mainstem system supports navigation on the Missouri River downstream from Sioux City, Iowa. This support to Missouri River navigation also produces incidental benefits to navigation downstream from the Missouri River.

Garrison Dam has a generating capacity of over 500,000 kilowatts. Through December 1988, it has produced over 70 billion kilowatt hours of low cost electrical energy. North Dakota receives about 13 percent of the energy produced by the Missouri River mainstem hydroelectric system. This is equivalent to about 61 percent of the energy produced at Garrison Dam in 1988.

Lake Sakakawea serves as a water supply source for two large industries, six communities, one rural water supply, and 34 individual domestic intakes in North Dakota. In addition, irrigation water is provided to 28 private operations drawing water directly from the lake.

The project also supports a multimillion dollar tourism industry in North Dakota. Lake Sakakawea is a major attraction for fishing, boating, hunting, and other outdoor recreation uses. The Corps of Engineers participated in the construction of 22 recreation areas on Lake Sakakawea; 11 of these 22 areas are operated by the Corps of Engineers and 11 are operated by non-federal entities. In addi-

tion, 23 other recreation areas have been built and are operated by other interests. The annual visitation to Lake Sakakawea has grown to more than 10 million visitor hours. Approximately 47,000 acres are licensed to the state for wildlife management and 4,200 are leased for public parks and recreation.

During project construction, major road and bridge work was necessary to provide access across the lake. The U.S. Highway 83 bridge at Snake Creek was replaced with an embankment. The State Highway 23 bridge was replaced with the Four Bears bridge. Bridges on State Highway 22 at the Little Missouri River and U.S. Highway 85 at Williston were modified. The State Highway 8 crossing was abandoned.

The Federal Government spent approximately \$3.2 million to realign roads impacted by the project's construction and to provide access to Lake Sakakawea. The current value of that expenditure exceeds \$25 million. This work was done at full Federal expense. The project road construction was accomplished in accordance with agreements with the State of North Dakota and local governments that specified which roads would be altered, relocated, or abandoned. The accomplishment of this work released the Federal Government from further obligation related to Lake Sakakawea's impacts on transportation. The Corps of Engineers has no funds or obligation to either maintain or upgrade existing roads or to construct new roads outside project boundaries.

In addition to needing suitable access roads, the tourist and resident populations drawn to the local areas by the recreation opportunities provided by Lake Sakakawea require other services. We provide the services at Corps of Engineers managed recreation areas. Law enforcement, road maintenance, emergency and rescue service, trash removal, sewage removal, mowing, and gate attendance usually are provided through contracts with local governments, companies, and individuals. The Corps spends about \$150,000 each year on these services at Lake Sakakawea. In addition, other operation and maintenance costs for the Garrison project total over \$6 million each year. Much of that amount is expended and remains in the area.

While the funds expended by the Corps in the region to operate the project contribute to the local economy, they do not compensate non-Federal interests for the lost tax base. Two Federal programs exist to deal with this problem and provide the region with funds. One program returns a portion of Federal lease revenues to the region and the other provides for direct payments.

Over 71,000 acres of land at Lake Sakakawea are leased for uses such as grazing, crops, minerals, cabin sites, and commercial recreation concessions; 75 percent of the revenue from these leases is returned through the state to the areas where the revenue was collected. Through 1988 a total of \$5 million has been returned to the six affected counties. These funds can be used to defray expenses for road maintenance or for other purposes.

As I mentioned, direct payments also are made to the region. The amount of Federally owned lands is reported annually to the Department of the Interior. This information is used as the basis for entitlement computations by the Department of the Interior which distributes funds to the state under the Payment in Lieu of

Taxes Act as amended, 31 USC 6901-6907. The Corps reported over 400,000 acres for Lake Sakakawea in 1988. This represents 48 percent of the total Federal entitlement acres reported in the six affected counties. The prorated amount attributable to the Garrison project is about \$144,000 of the total entitlement for 1988 which was \$301,000.

In summary, Garrison Dam and Lake Sakakawea provide significant benefits to the Nation, the State of North Dakota, and the region. Transportation infrastructure impacts were mitigated by replacement of two bridges and realignment of roads at Federal expense. Expenditures by the Corps and project visitors contribute to the local economy. Moreover, Federal sources directly contribute to regional revenues to compensate non-Federal interests for the lot tax base.

This concludes my statement, Mr. Chairman. I would be pleased to address any questions that you or members of your staff may have.

[The prepared statement of General Ryan follows:]

U. S. ARMY CORPS OF ENGINEERS
MISSOURI RIVER DIVISION

STATEMENT OF BRIGADIER GENERAL ROBERT H. RYAN
DIVISION ENGINEER
MISSOURI RIVER DIVISION
U. S. ARMY CORPS OF ENGINEERS
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
OF THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE
PARSHALL, NORTH DAKOTA

AUGUST 25, 1989

**STATEMENT OF BRIGADIER GENERAL ROBERT H. RYAN
DIVISION ENGINEER
MISSOURI RIVER DIVISION
U. S. ARMY CORPS OF ENGINEERS
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
OF THE SENATE ENERGY AND NATURAL RESOURCE COMMITTEE
PARSHALL, NORTH DAKOTA
AUGUST 25, 1989**

Mr. Chairman and members of the Subcommittee:

I am Brigadier General Robert H. Ryan, Division Engineer, of the Missouri River Division, U. S. Army Corps of Engineers. Accompanying me are John P. Elmore, Chief of Operations, Construction and Readiness Division in our Corps headquarters in Washington, and Colonel Donald E. Hazen, District Engineer, Omaha District. I am pleased to appear today on behalf of the Assistant Secretary of the Army for Civil Works to discuss some of the impacts of the construction and operation of the Garrison Dam and Lake Sakakawea.

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reservoirs on the Missouri River that serves a number of purposes, including flood control, navigation, hydropower, irrigation, recreation, fish and wildlife, municipal and industrial water supply and water quality.

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The Federal Government spent approximately 3.2 million dollars to realign roads impacted by the project's construction and to provide access to Lake Sakakawea. The current value of that expenditure exceeds 25 million dollars. This work was done at full Federal expense. The project road construction was accomplished in accordance with agreements with the State of North Dakota and local governments that specified which roads would be altered, relocated, and/or abandoned. The accomplishment of this work released the Federal Government from further obligation related to Lake Sakakawea's impacts on transportation. The Corps of Engineers has no funds or obligation to either maintain or upgrade existing roads or to construct new roads outside project boundaries.

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In addition, other operation and maintenance costs for the Garrison project total over 6 million dollars each year. Much of that amount is expended and remains in the region.

While the funds expended by the Corps in the region to operate the project contribute to the local economy, they do not compensate non-Federal interests for the lost tax base. Two Federal programs exist to deal with this problem and provide the region with funds. One program returns a portion of Federal lease revenues to the region and the other provides for direct payments.

Over 71,000 acres of land at Lake Sakakawea are leased for uses such as grazing, crops, minerals, cabin sites, and commercial recreation concessions. Seventy-five percent of the revenue from these leases is returned through the State to the areas where the revenues were collected. Through 1988, a total of 5 million dollars has been returned to non-Federal interests. These funds can be used to defray expenses for road maintenance or for other purposes.

As I mentioned, direct payments also are made to the region. The amount of Federally-owned lands is reported annually to the Department of the Interior. ~~This is used as the basis for an-~~

~~entitlement computations by the Department of Interior.~~ This is used as the basis for entitlement computations by the Department of the Interior which distributes funds to the state under the Payment in Lieu of Taxes Act, as amended, 31 U.S.C. 6901-6907. The Corps reported over 400,000 acres for Lake Sakakawea in 1988. This represents approximately 48 percent of the total Federal entitlement acres reported in the 6 affected counties. The prorated amount attributable to the Garrison project is about 144,000 dollars of the total entitlement for 1988, 301,000 dollars.

In summary, Garrison Dam and Lake Sakakawea provide significant benefits to the Nation, the State of North Dakota, and the region. Transportation infrastructure impacts were mitigated by replacement of two bridges and realignment of roads at Federal expense. Expenditures by the Corps and project visitors contribute to the local economy. Moreover, Federal sources directly contribute to regional revenues to compensate non-Federal interests for the lost tax base.

This concludes my statement, Mr. Chairman. I would be pleased to address any questions that you or other members of the Subcommittee may have.

Senator CONRAD. Thank you General Ryan for your statement. Perhaps we could go to the end of your statement first and address that.

You point out in your statement what I consider to be only part of the story. The part of the story to which you point is the mere fact that payments in lieu of taxes are made to local units. The part of the story that is left out is that the payment formula is not fully funded. In fact, local units have been getting 59 cents on the dollar according to that formula. I would be quick to point out that the formula itself does not represent an equivalent payment in terms of what other landowners would pay in property taxes, because when the formula was derived it was determined that there was some benefit by having a Federal installation in an area and so the Federal Government should not bear the full share that other landowners would.

And so I would ask you, would you agree that the payment in lieu of taxes is not fully funded according to the formula? Is there any dispute on that question?

General RYAN. Senator, I am not aware of those aspects, and I would have to rely on the facts you presented.

Senator CONRAD. I can tell you that it is accurate. We are getting nationwide about 59 cents on the dollar. And so while it is quite true that payments are made, they are not adequate. If I were to make an agreement with you that you would be paid on Formula A, and 20 years later I pay you only 59 cents of the dollar of Formula A, I really have not met my obligation to you. And that is exactly the situation you are hearing described today.

I think we should turn to another issue, which is the Corps' view that, under current law, there is no further obligation to replace or construct infrastructure, such as roads, bridges, and similar structures. I understand the Corps' position, as a legal matter, but it does conflict with the JTAC findings. JTAC, which, as I noted, was put together by the Reagan Administration, looked over the agreements made at the time of the taking and determined that the Federal Government did not meet its commitments and its obligations. Specifically they determined that promises made to both the Indian and the non-Indian communities that roads, hospitals, a boarding school and other vital pieces of the area's infrastructure would be reconstructed, never were kept. I am not here to say that that was a Corps failing. It was long before your time and long before my time. JTAC confirmed what North Dakota knew: the moral obligation of the Federal Government was not met. We have an obligation to do better than that.

I understand the position that you have taken here. But I hope what you hear today will allow you to understand that there is an unmet need here that the Federal Government has got to address. Obviously, the Corps does not make the laws, we should get that straight here today. The Corps does not make the law.

Let me go to the next issue, which is of obvious concern. I think you have heard it here today, General Ryan. I can tell you I have heard it loud and clear in the community forums I have held around North Dakota and in the correspondence I am receiving in my office. You certainly had a chance to hear it here today. That is the question of lake levels and the effect on the state and the

region from economic losses. Perhaps you could give us the Corps' analysis of where the lake level is today? What your anticipation of where the lake level will be in the immediate future and next year? What steps are the Corps taking, what considerations will the Corps give to reducing the amount of drawdown in order to prevent some of the catastrophic effects that people are reporting to us? Please give us your perspective on those issues.

General RYAN. Let me attempt to respond to that, Mr. Chairman. Your point that you made a few moments ago about the Corps not making the laws is exactly correct. We respond to the guidance received from the Congress or legislation and reflect back on the authorized purposes for the mainstem lakes which include flood control, navigation, irrigation, fish and wildlife, and recreation purposes. These projects were constructed in the 1930's through the 1960's to control a river that had been ravishing an area with both floods and drought for a number of years. These systems are here to absorb those excesses and shortfalls in runoff that occur. These lakes provide an absorbing or releasing capability.

We are now in the third year of a continuing drought. Lake Sakakawea is at the lowest point it has been since it was filled. It is a new experience for the citizens of North Dakota and a new experience for us as managers. We have used computer programs to simulate regulation of our reservoirs through the drought of the 1930's, which was a 12 year drought, and have pictured that.

Together with the states of the region and Federal agencies we developed in the 1950's and updated through 1979 what we refer to as a master regulation manual. This manual describes the measures we will take to conserve and release waters dependent upon the level of those waters and the level of inflow into those systems. It directs and controls our procedures.

At the present time we are managing the projects in accordance with the authorized purposes provided for by Congress. In accordance with the manual we have taken a number of measures to reduce the releases from our system. We have reduced the navigation season and reduced the support to navigation by reducing flows in the Missouri River navigation system. We have reduced our support to hydro-power production. The conservation resulting from these efforts has been a reduction of approximately 17 percent in the releases compared to the average releases for the years 1958 through 1986.

The savings that have occurred in this past year are 4.4 million acre feet. Our total storage capacity in the system is about 74 million acre feet.

Senator CONRAD. What is that number?

General RYAN. The number is 74 million acre feet. We presently have in the system a storage capacity of 46.1 million acre feet. We have considerable water remaining in the reservoirs, but the reservoirs are down. The upper three reservoirs, Fort Peck, Sakakawea, and Lake Oahe, are down roughly 20 to 22 feet from normal levels, so it is a serious impact.

Senator CONRAD. The earlier testimony was that we are at 1824.

General RYAN. Yes, sir.

Senator CONRAD. You would verify that number?

General RYAN. We are within a few tenths of that elevation right now.

Our problem is that we are seeing significantly reduced inflows due to the forces of nature, and so without those inflows, there is little ability to increase the level of the reservoirs. Our policy has been to conserve the water and to ensure lake access to the extent possible. With your help and General Hatch's help early this January, we developed a program to extend our boat ramps. We have invested \$1.5 million so far this year to extend or relocate the boat ramps in both North Dakota and in South Dakota.

Senator CONRAD. How much of that was invested in North Dakota?

General RYAN. Senator, I could furnish that for the Record. I don't have that figure at this moment.

Senator CONRAD. Would you please do that for us? It would be helpful to us to have that official figure.

[The information follows:]

Of the \$1.5 million invested so far this year to extend and relocate boat ramps in both North Dakota and South Dakota, \$436,000 was spent on Lake Sakakawea and \$30,000 was spent on Lake Oahe in North Dakota.

General RYAN. I would be pleased to do that. We also are committed to provide a similar amount to extend or relocate boat ramps in both North Dakota and South Dakota next year. We are preparing under Colonel Hazen's direction to ensure that we are ready to take action as soon as it is necessary. In other words, we are prepared, if the lake should fall, to extend those ramps with durable and solid ramp extensions to ensure that the public has lake access where we can. These ramps are Corps built and Corps operated or Corps built and operated by others, and are categories one and two.

Other ramps which were cost-shared ramps or built and operated by others are beyond our authority to invest Federal funds. For categories one and two ramps, we are cooperating with the state to identify their priorities for ramp extensions or relocations to ensure that we respond to the state's needs to protect as best we possibly can the recreation opportunities for the residents of the state and for the tourists who arrive from out of state.

Senator CONRAD. If we could, for the purpose of the record and of all of those who are listening, will you tell us what the drawdown is currently from the reservoir? How much is being released and how that compares to previous years? How much of a further reduction could be made? What are the factors that the Corps considers in determining what those release levels are?

General RYAN. For this time of year, the long-term average release is about 26,500 cubic feet per second through Garrison Dam.

Senator CONRAD. Give me that again?

General RYAN. The figure is 26,500 cubic feet per second. That is the average measurement of our water release. Today we are releasing through Garrison Dam 21,500 cubic feet per second.

Senator CONRAD. The 26.5 represents?

General RYAN. The average, the normal long-term average for the month of July through Garrison Dam.

Senator CONRAD. And 21,500 is the current release. Okay. What are the factors that you use to determine clear levels? In other words, how much does a release have to be to maintain hydro-power production? How much of a factor is that? How much of a factor is downstream transportation, barge traffic? Could you give us some judgments or some way of judging those matters?

General RYAN. We utilize the master manual to guide us in this process, and then we apply that to our release. As we handle these releases, every bit of water that goes through these dams is used to produce hydro-power at the present time. We don't have excess water, so we are producing hydro-power with every bit of water that goes through. We have reduced the hydro-power generation. As a result, the Western Area Power Administration has had to buy additional power off the commercial market to meet their long term commitments and contracts they have made to supply the power users.

Senator CONRAD. Could you give us a picture on how much hydro-power production has been reduced?

General RYAN. It has been reduced about 23 percent. Average total annual production is 10 billion kilowatts, and we forecast only 7.7 this year. That is a rough measure of the reduction of power production.

Senator CONRAD. You indicated in your earlier testimony that you reduced the navigation season. That is in my notes, is that correct?

General RYAN. That is correct. We reduced the navigation season last year. Last fall we closed two weeks early. We opened the 1989 season one week late this year, and we anticipate closing four weeks early this fall. The decision has not been made absolutely yet, but that is our prediction at this time.

Let me add, if I may, we have also reduced our flows during that period to support navigation by about 3,000 cubic feet per second.

Senator CONRAD. You reduced flows by 3,000 cubic feet per second during the season?

General RYAN. Yes, sir.

Senator CONRAD. Would you tell us what minimum flow is necessary to maintain downstream navigation, minimum release level necessary for that?

General RYAN. We are very close to that right now, because of reduced flows the barges have had to reduce their loadings. They have also had to reduce their tow sizes. Normally they have a nine barge tow. They are now down to a six barge tow, and they reduced their loading from eight and a half feet to eight feet.

Senator CONRAD. Eight feet?

General RYAN. Yes, sir. That is depth for the barges. The authorized channel is a nine foot channel, but because of our reductions in flow that channel has been diminished. We are seriously impacting on the profit margin that those towing companies have, reducing the size of tows and reducing the depth of draft for the barges.

Senator CONRAD. Could you give us a prediction or a projection on what barge tonnage will be this year versus a year ago?

General RYAN. I don't have that figure, Mr. Chairman. I would be glad to attempt to estimate it, but I will not have a specific figure until well into next year after the records are finalized.

Senator CONRAD. Please give us whatever projection you have on that number.

General RYAN. We expect in general terms the barge tonnage to be about the same as it was last year, about 2.3 million tons.

Senator CONRAD. Tonnage is the same even though the season is reduced and the draft of the vessels is reduced and the number of barges in any one haul reduced? Doesn't that indicate that some further reduction could occur?

General RYAN. We are not sure of that, Senator. But let me check on that and provide that for the record.

[The information follows:]

Average tonnage for the years 1983 through 1987 was 2.75 million tons. In 1987, 2.4 million tons were transported. Actual values for 1988 and 1989 are not available. Although there are indications that shipping volumes are significantly reduced at some locations, overall river traffic is expected to be near that of 1987.

Senator CONRAD. Let me go back to the question that I asked before, because I think it is important for us to understand the answer.

Is there an analysis within the Corps of what minimum flows be will accommodate downstream navigation? And by that I don't mean at their current level, but that would still accommodate navigation downstream. Do you have a bottom-line number of what is needed to maintain stream flow?

General RYAN. We do not, Mr. Chairman. That would be a decision by the individual shipper and carrier what they would have to have to float their towboats and to float their barges, and it would be based upon the cargo being carried and the benefits from that movement.

Senator CONRAD. It strikes me that you must have a number in your calculation as to what minimum release level you can go to and still maintain downstream navigation.

General RYAN. The master manual provides for a full duration season with a 6,000 cubic feet per second reduction. We have shortened the season and reduced flows by 3,000 cubic feet per second to release the same amount of water, but provide a shortened season with increased navigation depth. This was done because navigation interests told us that they could not operate with a 6,000 cubic feet per second reduction.

Senator CONRAD. We are at 5,000?

General RYAN. No, sir, we are 3,000 below our targets right now.

Senator CONRAD. Correct me if I am wrong, I heard you indicating we were at 26,500 cubic feet a second. And now we are at 21,500 which looks like a 5,000 CFS reduction.

General RYAN. That is for Garrison Dam. Our releases through Garrison Dam fluctuate from time-to-time, and the downstream dams flow even that out. Our last dam at the bottom of a six dam segment is Gavins Point Dam. Its releases determine the flow in the navigation segment.

Senator CONRAD. What is the Corps calculation of the minimum releases that could be made from Garrison to maintain downstream navigation? Is there such a calculation?

General RYAN. That number varies from time-to-time based upon the release conditions of other downstream dams.

Senator CONRAD. Could you give me some idea of what the range is?

General RYAN. Senator, I will provide that for the Record if I could.

Senator CONRAD. Have you got a number off the top of your head?

General RYAN. I do not.

Senator CONRAD. What are the priorities that the Corps takes into account where establishing release levels?

General RYAN. Our first priority is flood control. In this case flood control is not a concern. Our next priority is irrigation and water supply. We look at that.

Senator CONRAD. Is that a consideration under current conditions?

General RYAN. It is not a problem because the irrigators can extend their pipes and receive water.

Senator CONRAD. What is the next priority?

General RYAN. The next priorities we look at are hydro-power and navigation.

Senator CONRAD. And obviously hydro-power has been impaired to the extent of 23 percent reduction?

General RYAN. Navigation also has been impacted.

Senator CONRAD. Navigation season has been reduced?

General RYAN. The depths have been reduced as well.

Senator CONRAD. What is the next priority?

General RYAN. We then look at water quality and recreation.

Senator CONRAD. Water quality and recreation. And those are the five sets of priorities?

General RYAN. Yes, sir.

Senator CONRAD. And what rating is given to each? In other words, is navigation and hydro given a rating that is double that of recreation and water quality?

General RYAN. It is not done in that manner, Mr. Chairman. The master manual provides for support for navigation and hydro-power in reducing quantities as the lake levels decrease.

Senator CONRAD. So as I understand it it is a subjective determination, it is a management decision?

General RYAN. The decision is made within the criteria in the master manual established by the Joint Advisory Council involving the states and the Federal agencies and the Corps. There is not a specific economic measurement established.

Senator CONRAD. There is no formula like the formulas we learned in high school mathematics where you plug in the numbers for the X's and Y's and come out with an answer?

General RYAN. No, sir.

Senator CONRAD. Could you give me any idea on how 1988 tonnage compared with the amount projected in the Pick-Sloan authorizing legislation?

General RYAN. The 1988 tonnage was roughly 2.3 million tons. I do not know the Pick-Sloan's projection at this time.

Mr. ELMORE. Senator, as I recall that report projected 12 million tons annually.

Senator CONRAD. And you are at 2.3?

Mr. ELMORE. Yes sir. The highest year on the Missouri River was in the neighborhood of 3.3 million tons.

Senator CONRAD. What is the lowest tonnage.

Mr. ELMORE. I do not have that because that would go back in the initial years. I just don't have that on hand.

Senator CONRAD. Can you give me some feel for tonnages in recent years?

Mr. ELMORE. Well I can tell you that the record year, the 3.3 million tons occurred sometime in the early 1980's. I can't recall the exact year, but early in the 1980's. The tonnage then fell off for several years as I recall to between 2.7 million tons and 3 million tons. Then, as the General has reported, it dropped down to 2.3 last year.

Senator CONRAD. How much of the tonnage is project related?

Mr. ELMORE. That is not in that figure. That represents commercial activity only.

Senator CONRAD. I think we have fleshed out the record on that question. You have heard the concerns here. I was up in Williston the other day and people there are telling me if we go down another ten feet we will be back pretty close to the original channel in that part of the state, of course that is at the end of the lake. Can you give us what your projection is of what the lake level will be next year?

General RYAN. Mr. Chairman, we, of course, have to predict in some manner what the inflow might be, and we have identified curves which would be a 10 percent expectation and a 90 percent expectation.

Senator CONRAD. What is the most likely scenario?

General RYAN. No, we do not. Mr. Chairman, we do not do that, because that most likely level which was used previously was in fact misleading. The most likely level was based upon the long-term average inflows, and we all know that in a drought situation the long-term average inflows are not going to occur. Therefore, we have identified rather a 10 percent level and a 90 percent confidence level of where the lake level is going to be.

Senator CONRAD. Can you give us the 90 percent confidence level? Is that telling us that 90 percent of the time that this would be what would occur?

General RYAN. That level or levels above it would be reached. Our current forecast for July of 1990 shows a level of 1823.

Senator CONRAD. 1823?

General RYAN. Yes, sir.

Senator CONRAD. For July?

General RYAN. In July 1990, there is a 90 percent chance that the Lake will be at that level or above.

Senator CONRAD. So that would be a foot below where we are now?

General RYAN. That is correct.

Senator CONRAD. Could you tell me where people would be getting information of ten foot drop from where we are?

General RYAN. No, I do not know that.

Senator CONRAD. Do any of your calculations show a ten foot drop?

General RYAN. No, they do not, Mr. Chairman. Our forecast shows that there is a 90 percent chance that in March of 1990, which is our lowest point on this curve, the Lake would be at 1816 or above. Then we would expect some filling to occur due to inflows up to 1823 in the July timeframe.

Senator CONRAD. So in March of next year we will see 1816, which would be eight feet below where we are now?

General RYAN. That is correct, but I do not have a ten foot number.

Senator CONRAD. There is no good news in that for the Parshall water intake. They might be able to get by on that. That would be about the end of the line.

General RYAN. And we anticipate that the lake would be at that level or above within 90 percent confidence.

Senator CONRAD. Is there any place in the Missouri Basin where you anticipate a ten foot drop?

General RYAN. I am not aware of those numbers. I would have to go back and check our figures on that.

Senator CONRAD. With a 90 percent level of confidence we can say that, next March, we will be at 1816 feet, which would be an eight foot drop from where we are today?

General RYAN. That is based on our current levels and our current potential inflow.

Senator CONRAD. Do you anticipate the releases to continue at the current levels? Or are there any plans to reduce the release levels?

General RYAN. Mr. Chairman, we have met with the governors of North Dakota, South Dakota, and Wyoming, and with representatives of the governor of Montana just this past Monday on this general topic. We also expect to meet with the governors of all ten basin states on about 10 October to discuss this. We are looking at ways to conserve water. These issues would all require a basin consensus to accommodate. We would certainly reduce our releases in the wintertime significantly to conserve water and plan to do that. Our present plan is to reduce our releases on the 23rd of October from Gavins Point Dam in anticipation of the closing of the season on 1 November.

Senator CONRAD. Can you give us an idea of what the current release level is from Gavins Dam and what you intend to reduce it to in October?

General RYAN. Our current release is 32,000 cubic feet per second. It is our present expectation that we reduce those flows to roughly 10,500 cubic feet per second through a gradual reduction of the releases from Gavins Point Dam. We would have to adjust those flows upward during the freezing period to ensure water supply to the downstream municipal intakes and power plants.

Senator CONRAD. Can you tell us if you have a similar calculation for releases from Sakakawea?

General RYAN. We do, but I don't have those numbers.

Senator CONRAD. If you could provide those for the Record it would be useful as well.

General RYAN. Yes, sir.

[The information follows:]

If we receive the runoff that is forecasted for the rest of the season, the releases from Garrison will be reduced to 17,000 cubic feet per second by the end of September. Releases for November and December would be 20,000 cubic feet per second and releases during January and February would be 25,000 and 26,000 cubic feet per second respectively. These winter releases would be 8 percent lower than the 22-year average. All of these releases are based on receiving average runoff upstream and downstream for the rest of the season.

Senator CONRAD. I don't have to tell you, I talked to the governor after that meeting occurred. And he was not a particularly happy man. And I don't think I need to tell you that. And I think you can pretty well ascertain for yourself based on the kinds of things that people are saying to us, our constituents why he is not happy. And the extreme concern that exists among our people as to the effects of further reduction in terms of lake levels. I spent a day with some friends on the lake. And boy, I tell you seven feet in March even a foot down it is really going to have a serious effect. We went through channels going through marinas that are already just devastated. I mean, marinas that in past years when I have been there every boat slip filled, now two-thirds empty and activity just dramatically reduced. And this is in the middle of the summer. And we went through, we had a depth finder on this boat. And there is three feet in the channel. You are just barely making it through.

General RYAN. We are aware of those serious impacts, and there are serious sociological and economic impacts that occur. At the same time these reservoirs have done a significant job in the past and will in the future. We believe that this drought hopefully will be shortlived, and, we will soon be on the road to recovery and restoration of those economies.

Senator CONRAD. Let me ask you, do you have a divine source?

General RYAN. We have a list of options, and the last one is pray a lot. We do that a lot, sir.

Senator CONRAD. I have been doing a lot of that myself. This year was a pretty tough year. It looked like things might be pretty good. And then you got to that last week in June and 105 degrees and 20 miles an hour winds, 30 mile an hour winds and everything just went bad.

Let me ask you this. Can the Corps help with dredging in these areas where we have marinas and other facilities in order to keep them viable?

General RYAN. We have invested our funds in providing access through boat ramps by either extending, or where it is not possible, relocating them. We reprogrammed our funds to accommodate that to the maximum extent possible. We have avoided investing in dredging, because it has short-term payout and requires re-dredging in the future. So, we have not invested our funds in those categories of work at this time.

Senator CONRAD. Let me just say to you I understand what you have done and we appreciate what you did. We remember very well the meeting in which there was an agreement to do that. And I want to commend at this point Congressman Dorgan for his leadership in getting that meeting put together. And that was an important thing for all of us. And I appreciate the responsiveness of the Corps. But I want to say to you that if we are talking about further reduction from where we are now I think we have to go back to the drawing boards to a certain extent. And I hope you will

not be reluctant to come to Congress and say look we have got to have more help. This is a situation that cries out for redress. We have done the best we can with the existing resources, but I hope you are not reluctant to go to Congress and say we need additional assistance.

Mr. ELMORE. Well certainly, Senator, as always we would do that. We are aware, though, of the constrained resources that everyone is dealing with. While the Congress is dealing with that in its own wisdom, we certainly don't want to make inappropriate requests of Congress in that regard. We look at those things certainly, and we would come forward if we thought that it was appropriate.

Senator CONRAD. If we get into a situation in which we have further drops in the lake level and we have extended the ramps to the extent possible, dredging operations might allow some of these places to be viable until we get more normal rainfall and more normal snowpack and some restoration. I understand what you are saying about the short-term. I pray that short-term help is all we need. I very much hope that you do some thinking now about areas where a dredging operation might make a difference.

Do you have the authority and the ability to dredge if close determination indicated that would be helpful? Do you have the existing authority necessary to do it?

Mr. ELMORE. I really had not contemplated that question. I would need to do a little investigation of that before I commented on that, Senator.

Senator CONRAD. Let me indicate that we are now going overtime. I have got another meeting that I have got to be at in Killdeer, North Dakota. And I promised another group I would meet with them after this. I want to indicate that Governor Sinner, and the State Treasurer, Bob Hanson have statements for the record. We appreciate their contributions.

We will hold the Record open for two weeks. Before we close this Hearing I am going to open it to the audience. If there are people here who have a strong point of view they want to express or a question they would like to get answered. I would ask the General and Roger Patterson to stay here; maybe you can help me answer questions that might arise.

Anybody from the audience who has a compelling need to get a question answered or to make a comment we would be glad to hear it.

Mr. WARDLOW. Art Wardlow from New Town. How many ramps have they extended in South Dakota and how many have they extended in North Dakota?

Senator CONRAD. Good question.

General RYAN. Let me just tell you that in North Dakota there are 17 category one and two ramps. We extended 10 of those. One did not need extension. So there were in fact 11 operable ramps of the 17 in North Dakota.

In South Dakota there are 25 ramps in categories one and two. We extended 15 of those. Four did not need extension. So, 19 of 25 ramps were operable in South Dakota.

Senator CONRAD. Other questions, comments, suggestions?

Mr. DAROLD PETERSON. On that 26,500 figure that you used around the 21,000 level; 26,500 I understand is an average. Is that misleading? Does that include the year of the excess water we had some high year that we had to get rid of the water.

General RYAN. That is the long-term average. I don't know what numbers went into that. I really can't speak on that, but that is a long-term average. Unfortunately, Duane Sveum who is our Reservoir Control Center Director is not here today to provide the details on that.

Senator CONRAD. For the Record perhaps you could provide what the last, the yearly numbers have been and go back.

General RYAN. We will go back through the records and provide each years annual releases for the month of July.

[The information follows:]

The average July release from Garrison from 1967 through 1988 is 26,500 cubic feet per second. This period is used to calculate the average because the system did not reach normal operating levels until 1967. The average July release from Garrison for each of these years is listed below.

Year	Average release from Garrison during July	Year	Average release from Garrison during July
1967.....	31.2	1980.....	26.1
1968.....	16.4	1981.....	28.2
1969.....	26.5	1982.....	25.2
1970.....	26.2	1983.....	17.6
1971.....	34.7	1984.....	22.0
1972.....	26.8	1985.....	19.3
1973.....	19.9	1986.....	19.0
1974.....	25.8	1987.....	18.3
1975.....	61.8	1988.....	19.1
1976.....	36.5	1989.....	22.4
1977.....	17.4	Minimum.....	16.4
1978.....	38.5	Maximum.....	61.8
1979.....	26.0	Average.....	26.5

Senator CONRAD. That would get at the question that Darold is asking. We will get that for the Record.

Other questions or comments?

Mr. GILLETTE. Senator Conrad, as you know I have been a historian of the Garrison Dam in the construction pertaining to Fort Berthold. What I am going to refer back to is the 1988 Democratic Convention in Fargo. They went on record to do a study and have all of the land and the shorelines that are in Garrison project return those lands which are off the Fort Berthold Reservation, transfer the ownership of the shoreline and the minerals to the State of North Dakota. And those lands which are within the reservation, return those to the tribe or the other owners that had those at the time of taking. I read the REC that Mr. Hill represents. In that magazine it states that all the money it cost to construct the Garrison Dam has been paid for by sale already. If we can get the transfer of ownership of these lands which in my mind as a citizen of North Dakota the Corps of Engineers does need, they can never convince me that they need those lands for hydro or flood control now. The dams are here. They can manage them. Give them a

flowage which would allow recreation development both by non-Indian and the tribes. And we should all share in those revenues, the revenues which are produced. Give the dam to the state, give it to the tribe, both parts, either one. The revenue from these power sales they could be in lieu of tax payments which Mountrail County and the other representative counties are concerned about. Divided up the same way that the coal tax is split up by the impacted Congress. And that is what I would like to see as a citizen of North Dakota and also as a tribe member. In my mind I will never be convinced the Corps of Engineers needs all of this land and should have all of that regulation for local control when it directly affects us. They sit in the Omaha office and Washington, D.C. and every now and then they come out here and graciously visit us and then go back. And that is all. Thank you.

Senator CONRAD. Would you care to respond? We would be glad to have you have a chance to respond.

Mr. ELMORE. I would like to make one comment about the hydropower revenues that were referred to before. Let me tell you what the revenues are deposited in the Treasury. The amount returned to the Treasury for hydropower is set based upon the operation and maintenance costs of those projects together with their capital investment. There is no real profit generated from Corps of Engineer hydropower operations. It is simply a repayment with interest of both capital investment and the annual operation and maintenance cost. The capital investment can be paid back over a 50 year period.

Senator CONRAD. I will have one more after this, but then we have to quit. We are 20 minutes behind now.

Mr. DAROLD PETERSON. Brigadier General Ryan indicated they do not have the authority to use any of the Corps funds to extend ramps to the ramps other than particular Corps ramps. I would like to see that explored a little more. We don't have a Corps ramp in our area. What we do have they say is a volunteer situation. And it cost us a lot less to add 50 feet on than it does the normal—

Mr. ELMORE. I will go back to a definition for the audience of categories one, two, three, and four. Category one ramps are Corps owned and operated. Category two are those that the Corps constructed but leased and operated by others at the present time. Category three ramps were cost shared in the initial construction with some other entity and the Federal Government and the local entity operates them. Category four ramps are privately owned and operated.

We have a continuing authority to perform maintenance on our projects. Certainly that gives us the authority to maintain category one and two ramps, and that is what we consider those ramp extensions or relocations. Category three ramps, however, are subject to the terms of a contract between the Federal Government and another party; a contract which states that all construction, new construction will be cost shared at some predetermined formula and maintenance is purely the obligation of the other party. As you can see, category three ramps fall out, because maintenance is an obligation under the contract of our cost sharing partner. Simi-

larly, we have no authority to address the privately owned and operated ramps.

Senator CONRAD. That becomes a definitional question of whether it is new construction or maintenance. In my experience, lawyers can construe almost anything any way. And I have got a lawyer here. How do you see it?

Mr. ANDERSON. Your way.

Mr. ELMORE. Let me make another point if I may. If it is in fact construction then that means that I can't extend any ramps until another party agrees to cost share the work.

Senator CONRAD. So these are maintenance?

Mr. ELMORE. Yes, sir, and I can't have it both ways.

Senator CONRAD. You would be surprised. We will get to work on that.

Mr. KREBSBACH. Ron Krebsbach of Garrison. One thing that wasn't touched on at all as far as land surrounding the lake is weed control.

Senator CONRAD. Weed control.

Mr. KREBSBACH. There is a definite problem out there that has to be addressed, I think.

Senator CONRAD. Very good point. You have touched on something you are quite right it has not been discussed today. But it is a growing problem. We have a weed problem that is growing very seriously in North Dakota. This is on Corps controlled land.

Mr. KREBSBACH. State and Federal owned land.

Senator CONRAD. That is something else that needs to be considered and addressed. We ought to put that on the agenda for further discussion.

With that let me say that we have now gone about 25 minutes over our intended time. We will close this Hearing. We will leave the Hearing Record open for two weeks. If anybody wants to get further questions asked they should submit those within the time. And we would leave an opportunity for people to extend their statements and their answers. Give the Corps a chance to get us answers for those additional questions.

I want to thank everybody for their participation here today. I very much appreciate the local panel. I appreciate the Corps and the Bureau for being here and the Three Affiliated Tribes, Ed Lone Fight, and the rural electrics as well, Dennis Hill. Thank all of you for participating.

[Whereupon, at 12:25 p.m. the hearing was adjourned, subject to the call of the Chair.]

GARRISON DAM AND LAKE SAKAKAWEA

MONDAY, OCTOBER 9, 1989

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Bismarck, ND.

The subcommittee met, pursuant to notice, at 9:30 a.m., at the Pioneer Room of the State Capitol, Bismarck, ND, Hon. Kent Conrad, presiding.

OPENING STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM NORTH DAKOTA

Senator CONRAD. This Hearing before the Water and Power Subcommittee of the Senate Committee of Energy and Natural Resources will come to order. First of all I want to thank you all for your attendance here today. I also want to thank the distinguished chairman of the committee, Senator Johnston of Louisiana and the distinguished chairman of the subcommittee, Senator Bradley of New Jersey for agreeing to hold this Hearing today in North Dakota. Neither is able to be with us here today, but both understand and appreciate the importance of water resources to North Dakota.

The subcommittee is here this morning because water levels at Lake Sakakawea are at record lows and there are many unanswered questions about why that is the case. People are upset. And it is not hard to understand why.

After flooding over a million acres of valuable land, largely for the benefit of downstream interests, and after years of fighting for what we were promised in the Garrison Diversion Project, a project that remains incomplete, recreation at Lake Sakakawea is the largest benefit to date of those sacrifices. Now it seems that we can't depend on recreation either.

We know the Corps of Engineers cannot make it rain or snow. And we know the Corps must balance competing interests in managing the mainstem reservoirs. But many people believe that North Dakota is being treated unfairly or is at least not being properly considered in lake management.

We do not seek special treatment, but we do seek fair treatment. There should be no mistake about it. North Dakota will fight and fight hard for its rights to the use of Missouri River water. This senator will use all available means to insure that happens. Our state leaders and the rest of the congressional delegation share this commitment.

Events of the last several months leave me wondering whether the intent of Congress has been stood on end. The Flood Control Act of 1944 and more specifically the O'Mahoney-Millikin Amendment make clear that navigation interests along the Missouri are subordinate to upper basin beneficial uses.

The O'Mahoney-Millikin Amendment says: "The use for navigation in connection with the operation and maintenance of such works herein authorized shall be only such use as does not conflict with any beneficial consumptive use, present or future, in states lying west of the 98th meridian."

The preamble to the amendment declares: "It is hereby declared to be the policy of the Congress to recognize the interests and rights of the states in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control to preserve and protect to the fullest possible extent established and potential uses."

During congressional consideration of the Flood Control Act of 1944, many representatives of the upper basin states made quite clear their understanding of their intent of O'Mahoney-Millikin. South Dakota Congressman Francis Case, when explaining his own much less strict amendment, stated: "The upper states on the Missouri River are simply asking that the Congress declare that if a conflict ever should arise as to the use of this water the right of the upper states to first use will be recognized. That is all there is to it."

Illinois Senator Dirksen argued that "Not a soul in this body would deny a village or town the necessary water in preference to navigation. What difference does it make if you have a sufficient channel to float a battleship if the produce of the soil and the contents of factories and the livelihood and self-preservation that are involved here are not given first preference?"

Finally, Governor Moses of North Dakota stated that if the O'Mahoney-Millikin Amendment was not passed the Flood Control Act would make the upper basin states: "A province, a colony, a hinterland to serve the economic needs of the lower basin states."

We believe the Pick-Sloan Act and the O'Mahoney-Millikin Amendment must be read together. Pick-Sloan was in significant part intended to promote economic development in the upper Missouri Basin. The O'Mahoney-Millikin Amendment was intended to insure that the water needed for upper basin economic development would not be usurped by lower basin navigation interests. Read together, these two provisions were meant to promote and safeguard economic development in the upper basin. The law does not mean, as some would read it, that the upper basin is merely promised some minimal survival level flows.

Pick-Sloan and the O'Mahoney-Millikin Amendment mean that the upper basin has first call on the water needed to promote and sustain its economic development.

Needs and uses along the Missouri have changed since the 1940's but the law has not. Matching those changing needs to the law will not be easy, but we must begin. The Corps of Engineers has already indicated that it will review and revise its Master Operations Manual. We welcome their willingness. Other steps will undoubtedly be necessary and the process may require several steps.

In the short term there are several things that have and will be done to insure that North Dakota is treated fairly.

First, through hearings such as this, Congress will attempt to ascertain the truth about releases from the dam and attempt to determine how the Corps of Engineers prioritizes project purposes. The subcommittee may hold a second hearing in Washington within the next several weeks building on what we learn from this Hearing.

Second, Congressman Dorgan and I last week asked the General Accounting Office to study Corps management of Garrison Dam during 1988 and 1989 and report its findings to Congress.

Third, when I return to Washington I will introduce a bill that clarifies recreation as a project purpose. It will also require the Corps of Engineers to develop a drought management plan. And it will establish a citizens advisory committee to work with the Corps in reservoir management.

In the long-term, it may be necessary to approach these problems on a regional basis. Upper and lower basin states may want to consider a compact or association to promote balanced uses of our water resources. Governors in the region are already holding meetings on the subject, and the Northern Lights Research and Education Institute will hold a seminar next month in St. Louis to discuss the matter.

Whatever the approach, we must develop better ways to manage the mainstem dams along the Missouri. We are fortunate to have with us this morning several distinguished witnesses to help us begin this task. I thank them and all who are here for your interest in this subject.

Let me indicate this is an official hearing in the United States Senate. And that means we will follow the rules with respect to hearings. Very briefly, those rules are as follows: We will respect every witness. We will not have any demonstration of agreement or disagreement with what a witness says. This is not an attempt to in any way put people in an embarrassing position. This is an attempt to establish the facts, and establish what we ought to do for the future.

We are very honored to have with us as the lead-off witness the Honorable George Sinner, the Governor of the State of North Dakota. Welcome Governor Sinner. Thank you very much for appearing here today. Please proceed with your testimony.

Let me say to all witnesses that, if you choose to summarize your testimony, that is fine. We will leave the record open for 2 weeks for additional statements that anyone might want to make. And anyone who is not asked to be a formal witness is also welcome to submit a statement for the Record. With that, welcome Governor Sinner.

[The prepared statement of Senator Conrad follows:]

Statement of

SENATOR KENT CONRAD

Vice Chairman

Subcommittee on Water and Power

Senate Committee on Energy and Natural Resources

Oversight Hearing on Management of Missouri River

Mainstem Dams in North Dakota and South Dakota

Bismarck, North Dakota

October 9, 1989

Good Morning. Thank you for coming to this hearing before the Water and Power Subcommittee of the Senate Committee on Energy and Natural Resources.

I want to thank the distinguished Chairman of the Committee, Senator Johnston, and the distinguished Chairman of the Subcommittee, Senator Bradley, for agreeing to hold this hearing. Neither is able to be with us today, but both understand and appreciate the importance of water resources to North Dakota.

The Subcommittee is here this morning because water levels at Lake Sakakawea are at record lows, and there are many unanswered questions about why that's the case. People are upset, and it's not hard to understand why.

After flooding over a half million acres of valuable land -- largely for the benefit of downstream interests -- and after years of fighting for what we were promised in the Garrison Diversion Water Project -- a project that remains incomplete, recreation at Lake Sakakawea is the largest benefit to date of those sacrifices. Now it seems that we can't depend on recreation either.

We know that the Corps of Engineers cannot make it rain or snow, and we know that the Corps must balance competing interests in managing the mainstem reservoirs. But many people believe that North Dakota is being treated unfairly,

or is at least not being considered properly, in lake management.

We are not seeking special treatment, but we are seeking fair treatment. There should be no mistake about it. North Dakota will fight -- and fight hard -- for its rights to use of Missouri River water. This senator will use all available means to ensure that that happens. State leaders and the rest of the congressional delegation share this commitment.

Events of the last several months leave me wondering whether the intent of Congress has been stood on end. The Flood Control Act of 1944, and more specifically the O'Mahoney-Millikin amendment, make clear that navigation interests along the Missouri are subordinate to upper basin beneficial uses.

The O'Mahoney-Millikin amendment says:

The use for navigation, in connection with the operation and maintenance of such works herein authorized ... shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying ... west of the ninety-eighth meridian.

The preamble to the amendment declares:

[I]t is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control; to preserve and protect to the fullest possible extent established and potential uses.

Indeed, a legal scholar noted recently that the O'Mahoney-Millikin amendment and the congressional debate "[affirm] the idea that upstream consumptive uses ... have priority over navigation even if they [are] large and even if navigation suffer[s]." Guhin, John P., The Law of the Missouri, South Dakota Law Review, Spring 1985.

During congressional consideration of the Flood Control Act of 1944, many representatives of the upper basin states made quite clear their understanding of the intent behind the O'Mahoney-Milliken amendment and other legislative efforts.

South Dakota Congressman Francis Case, when explaining his own, much less strict amendment, stated: "The upper States on the Missouri River are simply asking that the Congress declare that if a conflict ever should arise as to the use of this water, the right of the upper states to first use will be recognized. That is all there is to it."

Illinois Senator Dirksen argued that "not a soul in this body ... would deny a village or town the necessary water in preference to navigation. What difference does it make if you have a sufficient channel to float a battleship, if the produce of the soil and the contents of factories and the livelihood and self-preservation that are involved here are not first given preference?"

Finally, Governor Moses of North Dakota stated that if the O'Mahoney-Milliken amendment was not passed, the Flood Control Act would make the upper basin states "a province, a colony, a hinterland to serve the economic needs of the lower-basin states."

The Pick-Sloan Act and the O'Mahoney-Milliken amendment must be read together. Pick-Sloan was, in significant part, intended to promote economic development in the Upper Missouri basin. The O'Mahoney-Milliken amendment was intended to ensure that the water needed for upper basin economic development would not be usurped by lower basin navigation interests. Read together, these two provisions were meant to promote and safeguard economic development in the upper basin. The law does not mean, as some would read it, that the upper basin is merely promised some minimal survival level flows.

Pick-Sloan and the O'Mahoney-Milliken amendment mean that the upper basin has first call on the water needed to promote and

sustain its economic development. That is all there is to it.

Needs and uses along the Missouri have changed since the 1940s, but the law hasn't. Matching those changing needs to the law will not be easy, but we must begin. The Corps of Engineers has already indicated that it will review and revise its Master Operations Manual. Other steps will undoubtedly be necessary, and the process may require two steps.

In the short term, there are several things that have and will be done to ensure that North Dakota is treated fairly.

First, through hearings such as this, Congress will attempt to ascertain the truth about releases from the dam, and attempt to determine how the Corps of Engineers prioritizes project purposes. The Subcommittee may hold a second hearing in Washington within the next several weeks.

Second, Congressman Dorgan and I last week asked the General Accounting Office to study Corps management of Garrison Dam during 1988 and 1989, and report its findings to Congress.

Third, when I return to Washington, I will introduce a bill that makes recreation a project purpose. It will also require the Corps of Engineers to develop a drought

management plan, and it will establish a citizens' advisory committee to work with the Corp in reservoir management.

In the long term, it may be necessary to approach these problems on a regional basis. Upper and Lower Basin states may want to consider a "compact" or "association" to promote balanced use of our water resources. Governors in the region are already holding meetings on the subject, and the Northern Lights Research and Education Institute will hold a seminar next month in St. Louis to discuss the matter.

Whatever the approach, we must develop better ways to manage the mainstem dams along the Missouri. We are fortunate to have with us this morning several distinguished witnesses to help us begin this task. I thank them and all who are here for your interest in this subject.

Congress of the United States
Washington, DC 20515

October 5, 1989

Charles A. Bowsher, Comptroller General
General Accounting Office
441 G Street
Washington, D. C. 20548

Dear Mr. Bowsher:

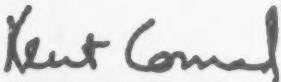
We are writing to formally request that the General Accounting Office (GAO) conduct a study on the level of releases from Garrison Dam for the period of drought beginning in the spring of 1988 through the fall of 1989. For the past two years, the states of the upper Missouri River basin have experienced a severe drought, which contributed to lake levels that are far below normal and have created serious recreational access problems to Lake Sakakawea.

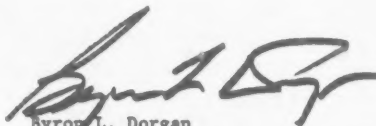
Throughout this time of drought, the US Army Corps of Engineers has maintained that the releases from Garrison Dam have been below full service level and that the Corps' policy has been on a "conservation mode." However, residents along the Missouri River in North and South Dakota claim that the river is as high as it has ever been. We would like the GAO to examine the releases from Garrison dam, comparing the release levels with previous years, and examine the policy determinations that the Corps utilized to determine the releases during the drought.

In your examination, we would like the GAO to determine whether or not the US Army Corps of Engineers Omaha District has a drought contingency plan in effect for Garrison Dam. We are interested in knowing if the Corps has managed the releases based upon a thorough examination of the water levels necessary for access on Lake Sakakawea and the economic impact that lack of access will have on North Dakota communities. In this examination, we would like an analysis of: (a) the way in which the Corps has prioritized the various authorized purposes of the project and (b) the extent to which the Corps has weighed the interests and needs of states in the upper Missouri River basin with those of downstream states in responding to the drought conditions. Specifically we would like to know how recreational interests in North Dakota have been balanced with downstream navigational interests and other purposes.

If you have any questions about this request, please contact our staff, Greg Rohde (225-2611) or Tobyn Anderson (224-2043).

Sincerely,


Kent Conrad, Vice Chairman
Senate Energy and Natural
Resources Subcommittee on
Water and Power


Byron L. Dorgan
Member of Congress

STATEMENT OF HON. GEORGE A. SINNER, GOVERNOR, STATE OF NORTH DAKOTA

Governor SINNER. Thank you Senator. Please extend my thanks to Senator Johnston for his support in this effort.

I guess my point of frustration reached its highest peak a number of months ago when the last budget officer prior to the current one struck the funding from the executive budget of the President for Garrison. He was a man I knew and, frankly, a friend of mine. His name was Bob Dawson. He came out of the Corps of Engineers and was budget director. I worked for the budget office in Washington for water project. I asked him, I said, "Bob, what on earth are you doing? Why did you strike that appropriation from the President's budget?" His response was, "Governor, in my judgment, this project has no national significance."

I realized then if that is the pervading feeling in Washington something is dramatically wrong and we better start asking some pretty serious questions.

On behalf of the people of North Dakota I thank you for being here. But I thank most of all the citizens who are here, the resort owners who have watched their investments fall into jeopardy and in some cases be literally washed down the river, the marine suppliers whose businesses not only have languished, but have failed completely, the sportsmen, the electrical interests in the room who have been so helpful to us, and the ordinary citizens who just plain care. We have seen boat ramps fall miles from the water. We have seen whole regions out of the river absolutely unusable because no one knows where the stumps are in the upper regions around Williston. And one can go on and on. The fact is North Dakota has suffered serious economic damage from the drought and large part by the hurt as a result of the reservoir drawdown under the Pick-Sloan Plan of the Missouri River.

North Dakota has had to fight hard for what little economic benefits we have received from this water management program. What you will be hearing today is how those benefits are now being damaged, even destroyed, because the water in Lake Sakakawea and Lake Oahe is being drained to serve downstream interests, particularly the navigation industry, and this in the midst of severe drought along the entire system.

For over a year and a half three agency heads have been working with the Corps to try to resolve the problem that kept on getting worse. The National Guard has worked with those agency heads to help people get their boat ramps to the water.

I would be remiss not to give credit to the Corps of Engineers for its assistance in this area. It has spent considerable resources extending and relocating boat ramps for public recreation. More recently it has begun to assist two North Dakota cities with water supply problems, one directly caused by low lake levels. I doubt the Corps of Engineers would continue to work on ramps and other projects if it could fill the reservoirs without conflicting with its own interpretation of the Master Manual, which I might point out dates back to 1944. I believe the Corps efforts are sincere to help us review and revise this Master Manual. To me the issue is much larger than simply blaming the Corps of Engineers.

We have appointed a citizens committee along with our agency heads and the Corps called the Water Access and Users Committee to continue an ongoing dialogue about what can be done to help us.

To put the present situation in proper perspective requires a quick history lesson on North Dakota's part in the Pick-Sloan Plan. Our major needs in the first place were two. First like everyone elses, flood control on an unpredictable Missouri. And second, water for sundry uses in dry years, particularly irrigation, recreation, municipal, rural, and industrial development. The trade-off would be the loss of incredible amounts of rich bottom land that would become the reservoirs. To draw North Dakotans into this kind of sacrifice the Federal Government offered Garrison Diversion which would allow us to reap benefits from the new reservoir. Irrigation would be commonplace, municipal and industrial water supplies would be met, cheap hydropower would abound, and even back in 1944 the recreation potential was recognized. We were lead to believe the return on our investment of land would be tremendous. That was the promise.

Let me read what the promise on this particular slide that goes back to the beginning of the planning for this project. On the slide in the gray area, there where the red ink is, reads the following: "North Dakota has contributed 568,000 acres of good agricultural land for Garrison and Oahe Reservoirs on the Missouri River. Of which 156,000 were irrigated or irrigable. These reservoirs are key features of the Missouri River Basin Project. The Garrison Diversion Unit and integral part of the overall project will help retrieve this loss." What a promise.

The real result of the program has been a series of broken promises. No irrigation, extremely little municipal, rural, and industrial development all of which must be fought for day after day in Congress, and a very modest recreation industry were all we got. We have received a mere fraction of what we were offered. And yet we are literally at the mercy of the Federal Government to fulfill any of these promises. Furthermore, I cannot stress enough the sacrifice of the Native Americans whose reservations border that lake. The Fort Berthold Reservation was divided forever by the wide waters of Lake Sakakawea. Standing Rock with no eastern access did not even get a water system. It remains today one of the ten poorest reservations in the United States. All this while in many states irrigation and irrigation of water are almost considered a divine right, but not here.

The O'Mahoney-Millikin Amendment to the 1944 Flood Control Act was intended to protect the vital interests of the upper river basin from being usurped by navigation. The spirit and intent of that amendment is clear. The Corps of Engineers Master Manual, the management book for the entire Pick-Sloan system gives some lip service to O'Mahoney-Millikin. And the Corps has stated its present management of the system does not violate its intent. The fact is however, our lake levels have far more to do with downstream navigational needs than it has to do with upstream drought or runoff conditions. To date the only answer our high and dry users have heard from the Corps is extend your pipes and extend your ramps.

The Corps tells us the Pick-Sloan Plan dictates to them that our consumptive uses, or any other rights to the water, are protected only below a lake elevation some 50 feet lower than it is today. Until it reaches that impossible level the release rates will be dictated primarily by the needs of navigation. To us this is an incredible prediction as the directive of the Master Manual seems to indicate to them. That that scenario be left to play out is unthinkable.

The bottom line is fairness. For too long the upper Great Plain States have played the role of whipping boys of the rest of the nation. We provide food, energy and water to the nation, but are compensated for this by having those resources exploited as is the case we are now dealing with. Even our conservation efforts are overlooked as we see in clean air legislation that does not acknowledge the leadership role our state has taken in cleaning up our own smoke stacks. The fourth lowest in SO_2 emission of the United States. And we are again to be made a whipping boy. We are literally being punished for the progress we have made. And so it is in wetlands the vast percentage of our land in wetlands the only state in the nation with a net-loss bill and states have the audacity to lecture to us about wetlands.

It adds insult to these injuries when our efforts to build a viable tourism and recreation industry, irrigation projects, and our municipal and industrial projects all end up taking a second seat to a single downstream interest. Even hydroelectric generation takes a backseat to navigation. The Missouri River has been a source of life and growth for us throughout history. It now seems to belong to someone else. And we can hope to benefit only from the leftovers.

Mr. Chairman, this is extremely serious. Many people are becoming very serious about pulling out of the project, just take it away. In light of the former OMB Officials statement that Garrison holds no national significance how can anyone blame them.

For our part we intend to carefully review the Corps Master Manual and work with southern states to form a more balanced and fair management policy. Unfortunately this may take as long as a year, although an earlier resolution is desperately needed. It may take action from Congress to get the Corps to make the interim changes that are needed.

Members of this Senate subcommittee I hope that you will all be aware that we urgently ask for your help. Reserve for us the rights of fairness that this project dictates in all of its considerations. We are asking you to get involved in revising the Master Manual and perhaps there are other areas that require or should require congressional involvement. The United States cannot afford further unfair water policies. In any case we need your support.

Thank you Senator for calling this hearing.

[The prepared statement of Governor Sinner follows:]



GEORGE A. SINNER
GOVERNOR

State of North Dakota

OFFICE OF THE GOVERNOR
800 E. Boulevard Ground Floor
BISMARCK, NORTH DAKOTA 58505-0001
(701) 224-2800



Senator Conrad, members and representatives of the Subcommittee, welcome to North Dakota. On behalf of the people of North Dakota, thank you for taking time to come here to listen to our testimonies.

North Dakota has suffered serious economic damage from the drought - part of the hurt is a result of reservoir draw down under the Pick Sloan plan on the Missouri River. North Dakota has had to fight hard for what little economic benefits we've received from this water management program. What you will be hearing today is how those benefits are now being damaged, even destroyed, because the water in Lake Sakakawea and Lake Oahe is being drained to serve downstream interests, particularly the navigation industry, and this in the midst of severe drought along the entire system.

I would be remiss not to give credit to the Corps of Engineers for its assistance in this crisis. It has spent considerable resources extending and relocating boat ramps for public recreation. More recently it has begun work to assist two North Dakota cities with water supply problems, one directly caused by low lake levels. I doubt the Corps of Engineers would continue to work on ramps and other projects if it could fill the reservoirs without conflicting with its interpretation of the Master Manual. I trust the Corps' effort to help us review and revise this Master Manual. To me, the issue is much larger than simply blaming the Corps of Engineers.

To put the present situation in proper perspective requires a quick history lesson on North Dakota's part in the Pick Sloan plan. Our major needs in the first place were two: first, like everyone else's, flood control on an unpredictable river, and second, water for sundry uses in dry years particularly irrigation, recreation, MR&I. The tradeoff would be the loss of incredible amounts of rich bottomland that would become the reservoirs. To draw North Dakotans into this kind of sacrifice, the federal government offered "Garrison Diversion," which would allow us to reap benefits from the new reservoir. Irrigation would be commonplace, municipal and industrial water supplies would be met, cheap hydropower would abound, and even back in 1944 the recreational potential was recognized. We were led to believe the return on our investment of land would be tremendous. That was the promise.

The real result of the program has been a series of broken promises. No irrigation, extremely little MR&I, all of which must be fought for with vigor, and a very modest recreation industry were all we got. We have received a mere fraction of what we were offered. We are literally at the mercy of the federal government to fulfill any of these promises. Furthermore, I cannot stress enough the sacrifice of the Native Americans whose reservations border these lakes. The Fort Berthold Reservation was divided forever by the wide waters of Lake Sakakawea.

The O'Mahoney-Milliken amendment to the 1944 Flood Control Act was intended to protect the vital interests of the upper river basin from being usurped by navigation. The spirit and intent of that amendment is clear. The Corps of Engineers' Master Manual, the management book for the entire Pick-Sloan system, gives some lip service to O'Mahoney-Milliken, and the Corps has stated its present management of the system does not violate its intent. The fact is, however, our lake levels have far more to do with downstream navigational needs than it has to do with upstream drought or runoff conditions. To date, the only answer our high and dry users have heard from the Corps is "extend your pipes" and "extend your ramps."

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The bottom line is fairness. For too long the upper great plains states have played the role of "Whipping Boys" of the rest of the nation. We provide food, energy and water to the nation, but are compensated for this by having those resources exploited, as is the case we are now dealing with. Even our conservation efforts are overlooked, as we see in clean air legislation that does not acknowledge the leadership role our state has taken in cleaning up our own smokestacks. We are literally being punished for the progress we've made.

It adds insult to these injuries when our efforts to build a viable tourism and recreation industry, irrigation projects and our municipal and industrial projects all end up taking a second seat to a single downstream interest. Even hydroelectric generation takes a back seat to navigation. The Missouri River has been a source of life and growth for us throughout history. It now seems to belong to someone else, and we can hope to benefit only from the leftovers.

This is very serious. Many people are becoming serious about pulling out of the project...just removing the dam! In light of the former OMB official's statement that Garrison holds no national significance, how can one blame them.

For our part, we intend to carefully review the Corps' Master Manual and work with southern states to form a more balanced and fair management policy. This may take as long as a year, although an earlier resolution is desperately needed. Members of this Senate Subcommittee, we urgently ask you to help us reverse the damage in the name of fairness. We are asking you to get involved in revising the Master Manual. Perhaps there are areas that require or should require, Congressional involvement. The U.S. cannot afford further unfair water policies. In any case, we need your support.

Senator CONRAD. Thank you, Governor, for the leadership that you have shown on this issue. I know there have been other meetings in which there was an attempt to determine the facts and determine what course might be pursued in the future so we could solve this problem. This is the first chance we have had to get on the official record of the Congressional committee with oversight authority on these matters. It is an important time for us to clearly lay the record so that our colleagues in Congress and their staffs can have available to them the facts as we see them.

Also, of course, we want to have a chance to hear from the Corps directly as to their interpretation and their view of events.

I am having put up a chart which shows the average daily output from Garrison Dam over the last four months for which there are records. September's record is not available yet. And, Governor, I would just ask you what your reaction would be if you learned that, according to the Corps, the releases from Garrison during three of the last four months for which we have records have been the largest in seven years? And in August, the release was the largest in the last three years. As you can see, these are the release levels in CFS units per month. They show, according to the record provided us by the Corps, that the release level in May was 20.7. The highest in seven years. June 22.4, the highest in seven years. July, 22.4. The highest in seven years. And August 21.8, the highest in the last three years.

What would be your reaction to that set of statistics?

GARRISON DAM AVERAGE DAILY OUTPUT

	MAY	JUNE	JULY	AUG	SEPT
1983	16.7	17.9	17.6	26.2	22.7
1984	13.7	14.0	22.0	27.1	25.6
1985	18.5	20.0	19.3	18.2	16.9
1986	10.6	14.9	19.0	23.8	19.3
1987	15.3	18.0	18.3	18.2	16.3
1988	18.6	19.1	19.1	18.0	13.7
1989	20.7	22.4	22.4	21.8	

Governor SINNER. Well Kent, we have seen these numbers before and the Corps again says well that is the way the Master Manual reads. We have to supply the irrigation needs. The rainfall in the lower regions of the Missouri was down as well as it was here, so what they did was they took the water out of the reservoir. And as far as I have been able to find out governors in the lower basin states hardly even knew there was a problem. In fact, they did not know there was a problem. That is how completely navigation needs have been supplied down there. They didn't even know there was a shortage of water in the basin. I have talked to several of the governors who said what is this meeting in Omaha about, we haven't noticed any problem. And that precisely is the problem. We became the fall-guys for the whole process.

Senator CONRAD. Governor what in your judgement are the actions that need to be taken by the Corps and by the Congress in order to redress the situation as we see it?

Governor SINNER. Well in my judgement they are going to have to set very high bottom-line level of that lake. It should be higher than the present state. And that may mean that navigation may have to stop at some point or be intermittent. We have seen the navigation numbers dropping for the last several years. And there is in fact in my judgement plenty of room for capitalizing those navigation periods in narrowing periods so we can reserve their intake levels. The difficulty is that the whole west is—by the likes of some—in for the same situation this winter, very low rainfall, very low snowfall. The report here from Dr. Arthur Douglas from the National Cattleman's Weather Forecast says the next six months looks like a continuation of the drought. Unless there is a recognition of the rights of the people in the upper basin states, we will continue to see the same thing. In my judgement there is going to have to be a realization and navigation demand that have to be curtailed sharply to correct our rights.

Senator CONRAD. If you were a member of the Congress what would be the priority items that you would want to focus your colleagues attention on with respect to management of the upper basin water resource?

Governor SINNER. Quite clearly the lower basin states have won billions of dollars of savings with the reservoirs system because of flood prevention. They have reaped huge benefits. It seems to me that justice demands that every consideration be given to these upper basin states as far as any benefits beyond the flood control are given downstream. To me that is not clear in the Master Manual. After O'Mahoney-Millikin is mind boggling. And to me Congress must make that absolutely implicit in congressional law that the upper basin states get priority of water needs in every single category because of the benefits of downstream flood protection.

Senator CONRAD. Thank you once again, Governor, for participating here today. We appreciate you taking your time to be here and help us as we work to resolve some of these problems. Thanks again for your leadership on this issue, not only here today, but with the many other meetings and contacts we have had on the subcommittee.

Governor SINNER. Thank you very much.

Senator CONRAD. Next we will hear from the Honorable William Guy, the former governor of the State of North Dakota, perhaps the single most knowledgeable individual in the State of North Dakota with respect to the history and the background of Pick-Sloan and the development of the water resource of the State of North Dakota.

Welcome Governor Guy, we very much appreciate you taking the time to be here.

**STATEMENT OF HON. WILLIAM L. GUY, FORMER GOVERNOR,
STATE OF NORTH DAKOTA**

Governor GUY. Senator Conrad, sitting here listening to Governor Sinner give some of the background and history I thought back to 1960 and 1961, 1962. At that time the Ten States Missouri Basin governors had an organization known as the Missouri States Committee. Those governors were the political arm you might say of the Pick-Sloan Plan that worked to bring about the scores benefits that were to be a part of Pick-Sloan. As the benefits were gradually achieved downstream lower states became less interested in the Ten States Missouri States Governors Committee.

However, there was a Missouri Basin Interagency Committee composed of federal agency about ten of them, plus representatives of the ten states drawn wholly or in part by the Missouri River. The Missouri Basin Agency Committee was designed to keep everybody in the basin aware of what each state's aspirations were and what they were doing. And what the Federal Government was planning to do. And there are about ten federal agencies that had to do with the Missouri Basin. The Missouri Basin Interagency Commission was superceded in 1972 by the Missouri River Basin Commission, which I like to take some credit for organizing. The Missouri River Basin Commission was the set up as a planning device that places states for the first time on an equal footing with federal agencies in planning the Missouri Basin. President Reagan in his wisdom decided it would be far better to save money, enough money to refit an obsolete battleship by canceling the Missouri Basin Commission. So we do not have a commission anymore. But we do have an obsolete battleship.

Following the demise of the Missouri Basin Commission which placed the federal agency and the states on an equal basis the states continued to operate as a ten state group hoping to coordinate the activities in the basin. Over a period of years that committee of ten states developed such a division between lower Missouri states and upper Missouri states that that committee went by the boards. And so today we have a ten state region dominated by federal agencies with states having little or no individual input as to the operation or development of the region. And I think that is one of the big weaknesses that we have at the present time in the Missouri Basin.

I have a statement that I put together that probably duplicates other statements that you will hear, but I will proceed at least until we find that it is getting too duplicate.

Some people might wonder what all the fuss is about. They might wonder why the lowering of Missouri River Reservoirs, leav-

ing boat launching ramps exposed, is such a big deal. But the exposed boat ramps are a symptom that has been building for years of a far more serious and unfair situation.

All of our nation's 50 states, including North Dakota, are self-contained governmental units charged with providing within each state's borders a wide array of state and local services, from schools and colleges to law enforcement, from fire protection to pollution control, from highways to care for the elderly, from utility regulation to care of the mentally ill, and on and on and on. To provide these services a state's citizens and their economic activity must generate sufficient tax revenue. That is what this fuss is all about. North Dakota is a governmental unit that has been and is being deprived of its ability to provide essential state and local government services. Economic activity requires a fundamental base of land and water.

The Pick-Sloan Missouri River Basin Plan has caused the State of North Dakota to lose both land and water. It has cast a shadow over this state's potential to raise tax revenues to maintain essential state and local services, let alone increase or improve those services.

The genesis of North Dakota's plight goes back to just prior to the Flood Control Act of 1944. In those years the spring snow melt in the Rocky Mountains and on the northern Great Plains would come roaring down the Missouri River creating heavy flooding and the accompanying loss of life and property occurring for the most part downstream. After a few weeks of destruction the Missouri River would subside to its usual shallow silt-carrying lazy self.

People downstream in Iowa, Nebraska, Missouri, and Kansas would suffer their river-side low land flood losses and angrily demand that the upper basin states of Montana, North Dakota, South Dakota, Wyoming, and Colorado keep their destructive flood waters upstream.

The Army Corps of Engineers proposed their time honored remedy, dam the mainstem of the Missouri River and to meter the release of dammed flood water for the benefit of a navigation industry that would spring up. There was no navigation before 1944 in the Missouri. Flood control and navigation was the Corps' bag and still is.

The Bureau of Reclamation, a veteran agency in making the deserts bloom with irrigation and electric power also had a plan to end downstream destruction. The Bureau would dam the Missouri River and divert flood water upstream where it originated to irrigate suitable land in the semi-arid dry land farming Northern Great Plains. The Bureau would pay for the dams and irrigation by selling hydroelectric power generated at the dam.

President Franklin Roosevelt called in General Louis Pick of the Army Corps of Engineers and Bureau of Reclamation head, Glenn Sloan and Franklin Roosevelt knocked their heads together saying he wanted a single plan embodying the advantages of both of their plans. The groundwork was laid for what was to become by way of the Flood Control Act of 1944 the Pick-Sloan Missouri River Basin Plan.

Under this plan there were to be scores of water development projects in the ten states drained all or in part by the Missouri.

The projects were to range from big ones like flood control, navigation, hydroelectric generation, and irrigation to little ones like municipal and industrial water, recreation, and wild waterfowl habitat enhancement. The benefits were to be spread broadly across all of the ten states in the Missouri Basin.

North Dakota was staggered to learn that the Pick-Sloan Plan called for it to permanently lose 840 square miles of high potential Missouri River bottom land. But not to worry said the downstream states, fearful of losing upstream flood water storage, the Pick-Sloan Plan will offset your economic loss by giving you a supply of water for 1,800,000 acres of irrigation. That legislated promise of water to be consumed in irrigation mollified North Dakotans, though our state's Indian tribes which took the greatest hit were not happy.

When the dams were in place on the Missouri River and the hydroelectric contracts to preference customers were firmly embedded, and when the downstream flood-prone land was fully reclaimed, and the navigation channel below Sioux City was dredged with levies built and bank stabilization installed, strange but predictable things began to happen to the promise to North Dakota and South Dakota. The Rocky Mountain and North Great Plains spring floodwater was no longer angrily pointed to from downstream as your upstream flood water. It became lovingly embraced as our downstream navigation water.

Senator Joe O'Mahoney of Wyoming and Senator Eugene Millikin of Colorado saw what would happen. So they affixed their amendment to the Flood Control Act of 1944 which specifically relegated navigation benefits to the bottom of the list of beneficial consumptive uses of Missouri River water which rose west of the 98th meridian.

With flooding safely in control by permanently flooding 1.2 million acres of upstream Missouri River bottom land behind the six mainstem dams, the downstream states permanently recovered 1.8 million acres of flood-prone bottom land. The perpetual economic result of that transaction was millions of dollars of annual economic loss upstream to provide millions of dollars of annual gain downstream at no cost to downstream states. Our North Dakota permanent flood now subsidizes their flood relief and river navigation in the lower Missouri River states.

Hydroelectric contracts to preferred customers were set up to mainly benefit the states which made little or no sacrifice under the Pick-Sloan Plan. North Dakota was short-changed again.

The powerful interests downstream who want no water diverted upstream for irrigation have moved in and successfully defeated using any Missouri River water for consumptive use for irrigation or any other significant purpose in North Dakota and South Dakota.

North Dakota and South Dakota are being given a one-time payment in the form of Farm Home Administration Water System type grants for small municipal water systems as a minuscule token payment for those states' permanent losses. The economic loss of more than \$100 million from the flooding of 840 square miles of high potential land occurs each and every year in North Dakota. And will in perpetuity.

But North Dakota and South Dakota have been forced to uphold their part in the Flood Control Abatement Program under Pick-Sloan. In so doing the two states have tried to take advantage of their reservoir disadvantages by slowly building water recreation industries. This effort has been at the will of Mother Nature and the pleasure of the Corps of Engineers. Now again we see our upstream recreation industries being sacrificed for downstream navigation, yet downstream navigation is heavily subsidized by the federal government and it has not lived up to its Pick-Sloan Plan billing in tonnage hauled. It is time for the Missouri River Reservoir Management Plan to be modernized.

There will be loud protests from navigation interests to any effort to spread benefits of the Pick-Sloan Plan to upstream states. For example they will ask how can we possibly get along without river navigation to take our crops to export markets? The answer is that the downstream commodity producers will have to for the first time compete with upstream producers by using the same transportation North Dakota must use; namely, truck and rail. After all that is the way it would be if North Dakota had not made it possible for the Flood Control Act of 1944 to go forward to protect downstream states from floods. Without North Dakota's contribution in land and its economic losses annually there would be no Missouri River navigation industry.

May I offer a reservoir management plan more consistent with fairness? I would establish a goal. The goal of the Army Corps of Engineers Missouri River Reservoir Management Plan shall be to efficiently, equitably, and fairly deliver water benefits under the Pick-Sloan Plan to the states in the Missouri River drainage basin taking account of the sacrifices and annual economic losses necessarily incurred by some states to make the Pick-Sloan Plan possible.

To achieve this goal I would ask that these principles and objectives are established:

One, each drop of water originating in the Missouri River Basin shall be used over and over again as it passes downstream for the benefit of irrigation, recreation, hydroelectric generation, wild waterfowl habitat enhancement, municipal and industrial use, and finally, navigation until each drop of water has been consumed or passes from the basin.

Two, a mainstem reservoir water release shall lower that reservoir only to that level required to provide capacity for maximum flood containment at which point stringent conservation measures shall be taken to limit water releases.

Three, reservoir states must accept permanent reservoir bottom land flooding and drastic floodwater lake level increases and the resulting fluctuations in reservoir levels in order to provide maximum floodwater retention and protection for downstream states.

Four, navigation states must accept drastic reductions in Missouri River levels in order to assure needed lake level conservation upstream.

Five, drought affect or flood affects in part of the ten state Missouri River Basin shall be shared by all the states in the basin by appropriate reservoir and river level management.

Six, because the timing of reservoir water release for hydroelectric generation does not affect total electric output, reservoirs shall not be managed to obtain that single benefit.

Seven, river navigation was not possible prior to the Pick-Sloan Plan and was made possible only by the annual economic loss to permanently flooded land under mainstem Missouri River reservoirs in upstream stages. Therefore, river depth and navigation season length shall not be the determining factor in reservoir releases, but rather they shall be subordinated to maintaining irrigation, recreation, and municipal and industrial water benefits in upstream states where the annual economic sacrifices are made.

Eight, heavy releases from upstream mainstem Missouri River reservoirs shall not be used to mask excessive irrigation appropriation and consumption of downstream Missouri River tributaries water which thus diminishes their owed contribution of water to the mainstem river. But in Nebraska Platte River, Niobrara irrigate immense acreages of water. There are over 500,000 acres of federally watered land in Nebraska. And incidentally we have I think about 20,000 in North Dakota. There are more than eight million acres of irrigation in Nebraska and I think we have close to 200,000 in North Dakota. But in order to not have to put Platte River and Niobrara water into the Missouri but rather use it in Nebraska for irrigation. Nebraskan's expect us to supply the water from up here to replace the water that their two big tributaries should be contributing. That should not be allowed.

Nine, the O'Mahoney-Milukin Amendment to the Flood Control Act of 1944 which says in effect that water rising west of the 98th meridian shall not be used east of that line in conflict with needs west of that line for domestic, farm, industrial use and irrigation shall be followed.

Ten, the upstream benefits of recreational use of the mainstem reservoirs shall be as enthusiastically, creatively, and financially supported by the Army Corps of Engineers in building boat ramps, public access, and other recreational facilities as they now financially support the lower states river channel dredging, navigation aids, river bank stabilization and recreational facilities.

Unfair reservoir management practices which for various reasons are or have been implemented in the past shall not be deemed permanent simply because of past usage and the passage of time. The Missouri River Basin water management of its reservoirs, unlike the dams themselves is not set in cement. Changes to move toward equity and fairness must be made and constantly reviewed to bring about improvement.

Mr. Chairman, Senator Conrad, that concludes my statement.

[The prepared statement of Governor Guy follows:]

STATEMENT OF WILLIAM L. GUY
FORMER GOVERNOR OF NORTH DAKOTA
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES
BISMARCK, NORTH DAKOTA
OCTOBER 9, 1989

Some people might wonder what all the fuss is about. They might wonder why the lowering of Missouri River reservoirs, leaving boat launching ramps exposed, is such a big deal. But the exposed boat ramps are a symptom that has been building for years of a far more serious and unfair situation.

All of our Nation's 50 states, including North Dakota, are self contained governmental units, charged with providing, within each state's borders, a wide array of state and local services, from schools and colleges to law enforcement, from fire protection to pollution control, from highways to care for the elderly, from utility regulation to care of the mentally ill; and on and on. To provide these services, a state's citizens and their economic activity must generate sufficient tax revenue. That is what this fuss is all about. North Dakota is a governmental unit that has been, and is being deprived of its ability to provide essential state and local government services. Economic activity requires a fundamental base of land and water.

The Pick/Sloan Missouri River Basin Plan has caused the state of North Dakota to lose both land and water. It has cast a shadow over this state's potential to raise tax revenue

to maintain essential state and local services, let alone increase or improve those services.

The genesis of North Dakota's plight goes back to just prior to the Flood Control Act of 1944. In those years, the spring snow melt in the Rocky Mountains and on the Northern Great Plains would come roaring down the Missouri River, creating heavy flooding and the accompanying loss of life and property, occurring for the most part down stream. After a few weeks of destruction, the Missouri River would subside to its usual shallow silt-carrying lazy self.

People downstream in Iowa, Nebraska, Missouri, and Kansas would suffer their riverside lowland flood losses and angrily demand that the upper basin states of Montana, North Dakota, South Dakota, Wyoming, and Colorado keep their destructive flood waters upstream.

The Army Corps of Engineers proposed their time-honored remedy -- dam the mainstem of the Missouri River and meter the release of dammed flood water for the benefit of a navigation industry that would spring up. Flood control and navigation was the Corps' bag, and still is.

The Bureau of Reclamation, a veteran agency in making the deserts bloom with irrigation and electric power, also had a plan to end downstream destruction. The Bureau would dam the Missouri River and divert flood water upstream where it originated, to irrigate suitable land in the semi-arid dry-land farming Northern Great Plains. The Bureau would pay for

the dams and irrigation by selling hydroelectric power generated at the dam.

President Franklin Roosevelt called in General Lewis Pick of the Army Corps of Engineers and Bureau of Reclamation head, Glenn Sloan, and knocked their heads together, saying he wanted a single plan embodying the advantages of both. The groundwork was laid for what was to become, by way of the Flood Control Act of 1944, the Pick/Sloan Missouri River Basin Plan.

Under this plan, there were to be scores of water development projects in the ten states drained all or in part by the Missouri. The projects were to range from big ones, like flood control, navigation, hydroelectric generation and irrigation, to little ones like municipal and industrial water, recreation, and wild water fowl habitat enhancement. The benefits were to be spread broadly across all of the ten states in the Missouri Basin.

North Dakota was staggered to learn that the Pick/Sloan Plan called for it to permanently lose 840 square miles of high potential Missouri River bottomland. But not to worry, said the downstream states (fearful of losing upstream flood water storage), the Pick/Sloan Plan will offset your economic loss by giving you a supply of water for 1,000,800 acres of irrigation. That legislated promise of water to be consumed in irrigation mollified North Dakotans, though our state's Indian tribes, which took the greatest hit, were not happy.

When the dams were in place on the Missouri River, and the hydroelectric contracts to preference customers were firmly imbedded, and when the downstream flood-prone land was fully reclaimed, and the navigation channel below Sioux City was dredged with levies built and bank stabilization installed, strange but predictable things began to happen to the promise to North Dakota and South Dakota. The Rocky Mountain and Northern Great Plains spring flood water was no longer angrily pointed to from downstream as "your upstream flood water." It became lovingly embraced as "our downstream navigation water."

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But North Dakota and South Dakota have been forced to uphold their part in the flood control abatement program under Pick/Sloan. In so doing, the two states have tried to take advantage of their reservoir disadvantages by slowly building water recreation industries. This effort has been at the will of Mother Nature and the pleasure of the Corps of Engineers. Now, again, we see our upstream recreation industries being

sacrificed for downstream navigation, yet downstream navigation is heavily subsidized by the federal government, and it has not lived up to its Pick/Sloan Plan billing in tonnage hauled. It is time for the Missouri River Reservoir Management Plan to be modernized.

There will be loud protests from navigation interests to any effort to spread benefits of the Pick/Sloan Plan to upstream states. For example, they will ask, "How can we possibly get along without river navigation to take our crops to export markets?" The answer is that the downstream commodity producers will have to compete with upstream producers by using the same transportation North Dakota must use -- truck and rail. After all, that's the way it would be if North Dakota had not made it possible for the Flood Control Act of 1944 to go forward to protect downstream states from floods. Without North Dakota's contribution in land and its economic losses annually, there would be no Missouri River navigation industry.

May I offer a reservoir management plan more consistent with fairness?

* * * *

The goal of the Army Corps of Engineers Missouri River Reservoir Management Plan shall be to efficiently, equitably, and fairly deliver water benefits under the Pick/Sloan Plan to the states in the Missouri River drainage basin, taking

account of the sacrifices and annual economic losses necessarily incurred by some states to make the Pick/Sloan Plan possible.

To achieve this goal, these principles and objectives are established:

1. Each drop of water originating in the Missouri River Basin shall be used over and over again as it passes downstream, for the benefit of irrigation, recreation, hydroelectric generation, wild waterfowl habitat enhancement, municipal and industrial use, and, finally, navigation, until each drop of water has been consumed or passes from the basin.
2. A mainstem reservoir water release shall lower that reservoir only to that level required to provide capacity for maximum flood containment, at which point stringent conservation measures shall be taken to limit water releases.
3. Reservoir states must accept permanent reservoir bottomland flooding and drastic flood water lake level increases, and the resulting fluctuations in reservoir levels in order to provide maximum flood water retention and protection for downstream states.
4. Navigation states must accept drastic reductions in Missouri River levels in order to assure needed lake level conservation upstream.

5. Drought effects, or flood effects, in parts of the ten state Missouri River Basin shall be shared by all the states in the Basin by appropriate reservoir and river level management.
6. Because the timing of reservoir water release for hydroelectric generation does not effect total electric output, reservoirs shall not be managed to obtain that single benefit.
7. River navigation was not possible prior to the Pick/Sloan Plan, and was made possible only by the annual economic loss to permanently flooded land under mainstem Missouri River reservoirs in upstream states; therefore, river depth and navigation season length shall not be the determining factor in reservoir releases, but rather they shall be subordinated to maintaining irrigation, recreation, and municipal and industrial water benefits in upstream states where the annual economic sacrifices are made.
8. Heavy releases from upstream mainstem Missouri River reservoirs shall not be used to mask excessive appropriation and consumption of downstream Missouri River tributaries, diminishing their owed contribution of water to the mainstem river.
9. The O'Mahoney-Milliken Amendment to the Flood Control Act of 1944, which says in effect that water rising west of the ninety-eighth meridian shall not be used east of

that line in conflict with needs west of that line for domestic, farm, industrial use and irrigation, shall be followed.

10. The upstream benefits of recreational use of the mainstem reservoirs shall be as enthusiastically, creatively, and financially supported by the Army Corps of Engineers in building boat ramps, public access, and other recreational facilities, as they now financially support the lower states river channel dredging, navigation aids, river bank stabilization and recreational facilities.
11. Unfair reservoir management practices which, for various reasons, are or have been implemented in the past shall not be deemed permanent simply because of past usage and the passage of time. The Missouri River Basin water management of its reservoirs, unlike the dams themselves, is not set in cement. Changes to move toward equity and fairness must be made and constantly reviewed to bring about improvement.

Senator CONRAD. Thank you very much, Governor Guy, for an excellent statement. I read your statement last night and was once again taken with the depth of your knowledge of what has occurred and how North Dakota and other upstream interests have been adversely affected by subsequent decisions. If you were able to ask the Corps a question or a series of questions what would those questions be?

Governor GUY. Well, I would like to know what the cost per ton mile is for navigation on the lower Missouri compared to other rivers, for example the Mississippi. I think we would find that the Corps in order to make whole their argument that the mainstem dams could provide both flood control and navigation are supporting a navigation industry that is pretty expensive. And at the same time is not supporting in itself for any form of taxation. The downstream benefits of flood control and the downstream benefits of navigation occur in those states without any cost whatsoever and are totally federally underwritten.

Senator CONRAD. Could we go back to the point that you made about the amount of irrigation that is occurring in Nebraska versus what is occurring in North Dakota. I think that is a very important and telling point that my colleagues would certainly appreciate and understand if we can make it clearly to them.

What is the acreage that is irrigated in Nebraska versus the comparable amount in North Dakota?

Governor GUY. I attended the committee for the year 2000 the other day. And I heard somebody say we are lucky if we don't have irrigation in North Dakota because irrigation farmers are going bankrupt left and right. But those bankrupt farmers in Nebraska irrigate eight million acres plus. And they plan to go to 12 million eventually.

And of that present acreage more than 500,000 of it is watered by federal water.

In this state we have virtually no irrigation watered by federal water.

Senator CONRAD. And so the point is that we took an enormous hit. You used the figure \$100 million for the loss of over 560,000 acres that were permanently flooded. I was trying to do some calculations myself last night. I think you conceivably could get to a figure that would be double that amount based on the multiplier of economic activity.

Governor GUY. Well four years ago North Dakota State University agriculture economists were asked to calculate the annual loss because of the two reservoirs. And at that time their calculations said \$132 million annually. But I have always wanted to be very conservative, Senator. I favor the understatement.

Senator CONRAD. I know that you do. \$100 million is sufficiently eye-catching. But the point really is that we gave up a tremendous economic opportunity represented by rich bottomlands. We gave it up hoping in some way to help ourselves. Although we benefited from flood control, the majority of the benefit really flowed to downstream interests. And now when we get into a crunch due to drought it seems apparent to me that, once again, we are being asked to be the major contributor to help our downstream neighbors. Would that be a conclusion that you would agree with?

Governor GUY. I would say that the Corps has a water management plan. But in that plan they also have a squeaking wheel part. And so the wheel has been squeaking downstream more than it has squeaked upstream. And I think our purpose here today and henceforth is to see that the squeak up here is fully as loud as it is downstream.

I just read Newsweek's prognostication of what is happening to the upper Missouri states including North Dakota and South Dakota. It was a pretty dismal story on the economics and the future of this state. But it was interesting to me to note that one reason why Newsweek was able to do that was because a federal government policy in one, the grants made to research institutions either directly or through the National Science Foundation which in turn breathes or develops satellite industries around that research and research creates the need for more research. So the federal government has had a great deal to do with the placement of defense industries in this country through this grant program. And here we have another case of the federal government stepping in to see that we remain one of the colonial states up here by their own policies. And I think that that is one thing that the federal government could change quite easily. I cannot believe that the transport of less than three million tons of—a lot of those three million tons I think are rock ballast for the bank stabilization the Corps puts in downstream to protect that stream of navigation program that is carried on down there. But they are a part of the federal government that is causing the programs, the economic programs we have up here.

Senator CONRAD. All right. I want to thank you again for your excellent testimony and for bringing your expertise and knowledge to the use of the committee. I think my colleagues will find it of special use. Thank you for the effort that you have made to participate here today. Thank you, Governor Guy.

Next we will hear from two witnesses who represent the Governor of South Dakota, Richard Beringson, Secretary of the Department of Game, Fish and Parks of the State of South Dakota and Floyd Matthew, Secretary of the Department of Water and Natural Resources for the State of South Dakota. I want to welcome you both and indicate how pleased we are that the Governor of South Dakota sent you to represent him at this hearing today. And also we would like you to take back the message that we appreciate the involvement of the governor as we proceed to try to ascertain precisely what is happening, what the plans are for the future. Thank you for taking the time to participate here today.

Richard did I pronounce your name correctly?

Mr. BERINGSOON. That is correct.

Senator CONRAD. Why don't you proceed with your testimony and then we will hear from Floyd and then get to questions of the two of you.

STATEMENT OF RICHARD BERINGSOON, SECRETARY, DEPARTMENT OF GAME, FISH AND PARKS, STATE OF SOUTH DAKOTA

Mr. BERINGSOON. Good morning Senator. I am very pleased to be here. As you said I am Richard Beringson, Secretary of the South

Dakota Department of Game and Fish. I am here today on behalf of Governor Mickelson to express South Dakota's concern about declining water values in the Missouri River reservoir system. It is a very important topic for our governor. As you may or may not know he is the president of the Upper Missouri River Basin Governors Group. And kind of led the charge. These figures you have up here are not dissimilar from figures we have in South Dakota. Except we had a little bit bigger drawdown this spring than Garrison did. You did see some water in places this year. South Dakota did not. So that is the major difference. But our drawdown has been considerable also.

The Governor would have been here himself today but he is on his way to Omaha right now to prepare for tomorrow's meeting of the entire Missouri River Governors forum which is going to be held in Omaha tomorrow. So that is why I am here.

I have with me Floyd Matthew who is the Secretary of Water and Natural Resources for the State of South Dakota.

South Dakota, North Dakota, and the other upper basin states depend on adequate water levels for domestic water supplies and irrigation, for fishing and recreation, and for the support of a rapidly growing tourism industry. These are important priorities for us, priorities that have to be adequately considered with other uses downstream.

Unfortunately, the Corps of Engineers proposed plan of operation does not allow the flexibility to respond to changing needs and priorities that develop as a result of our present drought situation.

At a time when the Midwest has experienced one of the worst droughts in history it makes little sense to consider any but the most conservative approaches to water level management on the Missouri River reservoirs.

Although the Corps of Engineers delayed releases for downstream navigation one week later than normal and reduced releases about four weeks earlier than normal this year to conserve water in the upstream reservoirs this plan misses the point. We need higher water throughout the spring and summer if we are to meet the needs of the upper basin states. Reduced levels have affected irrigation by increasing pumping costs, reducing pumping efficiency, and requiring intake extensions. In some cases farmers had to quit irrigating because of insufficient water supplies or the high cost of extending intakes.

Clearly low water levels could jeopardize water supplies available for domestic and irrigation uses. Any further water level reductions in Lake Oahe would have a significant impact on the agricultural economy in South Dakota. Water should be conserved within the Missouri River system to avoid impacts on domestic and agricultural uses of the water.

Another major concern is having continued access to the lakes. I would like to compliment the Corps of Engineers on the work they did this summer locally to extend the ramps. I think they did a good job and they did keep a lot of them open which was greatly appreciated. But people coming to use the lakes for recreation almost always bring a boat. When the boat ramps are high and dry or the beach has turned into a barren mud flat people are forced out of the recreation areas we have worked so hard together with

the Corps to provide. Boat ramps must be extended to assure continued access to boaters. But this public expense could be avoided through better water level management and implementation of overdue conservation practices.

Water levels and access to the reservoirs have a direct bearing on the Missouri River's tourism appeal. Governor Mickelson's Missouri River Resource Enhancement Program clearly emphasizes that the recreational resources of the Missouri River are an element that is vital to South Dakota's future. The Department of Tourism estimates the direct economic impact of Missouri River recreation is about \$156 million annually.

Missouri River development is the key to boosting our tourist economy and the figures show the success we have had over the last four years. But this is still a young and fragile market. As investors discover they cannot depend on water levels on the Missouri River reservoirs it will be impossible to attract the development we so badly need. Adequate water levels are necessary during the summer tourist season to insure public access and successful tourism development.

Reservoir water levels and inflows are also a major factor in successful fish reproduction and recruitment. We know good year classes are produced in years of high flows and reservoir elevations. Low water years have immediate and long term fisheries impacts. Usually fishing success during low water years is good. Such as we had this year. Fish are confined to less habitat and natural production of forage fish is low. This results in good catch rates for anglers but will lead to reduced fish growth and decrease the quality of fish population. That is evident in our salmon population right now in South Dakota. And I believe it is also in North Dakota. Last week South Dakota proposed a reduction in the walleye limit, a severe restriction on the number of large walleyes anglers can take a minimum size limit of 14 inches. These restrictions are necessary in part because of the falling reservoir levels over the past three years.

Long-term impacts of low water result two to five years following the low water cycle. Year classes produced during low water periods may be weak or lacking. The fishery depends on annual recruitment to the population to maintain adequate angler success. Weak year classes reduce catch rates and angler success for several years until a strong year class enters the fishery. As a result we have a boom or bust fishing situation.

The value of Missouri River sport fishing cannot be overemphasized. Fishing accounts for a significant portion of the total economic impact of outdoor recreation on the Missouri River, a total estimated at \$156 million annually. Lake Oahe alone accounts for approximately \$56 million of this.

Fish of course are not the only wildlife affected by water level management. Federally endangered Least Terns and threatened Piping Plovers, two species that nest below Gavin's Point Dam and Fort Randall Dam must be taken into consideration in any Corps of Engineers water level management plan. Although measures have been taken in past plans to accommodate downstream navigation and still maintain nesting colonies of these birds it would

appear that these plans may have had some negative impact on the amount of habitat available for nesting.

While this may arguably be deemed to be an acceptable cost during normal run-off years limiting releases to conserve water during our present low water conditions could benefit the endangered species by increasing the habitat available. Delaying navigation releases until late August or September when the demand for barge traffic and profit for operators is greatest could increase the amount of habitat and increase nesting success for Terns and Plovers.

We also strongly oppose any increase in Missouri River flows to directly supplement the flows of the Mississippi River for navigation purposes. We believe any revision of normal Missouri River system operations to support navigation on the Mississippi River may constitute an unauthorized use of the Missouri River reservoir system, may require a congressional amendment to the 1944 Flood Control Act, and may require the completion of an environmental impact statement including a detailed benefit cost analysis.

In conclusion the drought conditions of the 1980's now threaten the outdoor recreation industry, municipal and rural domestic water supplies, and the irrigation that has developed along the Missouri River reservoirs. Hydropower production has been substantially reduced. And it may be several years before hydropower generation returns to normal averages. The fisheries resources is under stress due to a shrinking habitat and forage base. The potential exists next year with optimum water level management to prevent further stress and to enhance the fishery by inundating vegetation that has been exposed during the last couple of years. If water levels continue to recede problems with the fishery will develop that require a longer recovery period.

Meanwhile resort owners and the public struggle with difficult boating access, the loss of protected marina basins, and the uncertainty that access can be maintained. If water levels should recede a few feet lower than the record low water we are experiencing this year a major part of our economy will be seriously hurt.

I found out this morning in a sideline to this, it doesn't really have anything to do with water levels or the Corps of Engineers. But we had three marinas in South Dakota that asked for Small Business Administration operating loans. The answer they got back was they didn't qualify because the problem was not drought related. That in order to be drought related emergency it has to be sudden and catastrophic. To me that is kind of like having cancer it takes a long time to die.

On August 21, 1989 the upper basin governors from South Dakota, North Dakota, Montana and Wyoming worked out a position statement that clearly sets out our position on the action that is needed. The upper basin governors agreed that:

One, the upper basin states should be given the same consideration during a prolonged drought that lower basin states are given when the potential exists for flooding. To achieve this goal we believe that reservoir operation plans and priorities should be adjusted to recognize contemporary needs, changing values and the contribution the upper basin states have made to operation of the entire river system.

Two, the upper basin states should be provided minimum water level much higher than stated in the current operating plan and our rights to use of Missouri River waters should be clearly established.

Three, in the short-term every option to conserve water in the upper basin should be explored and implemented wherever practical until the effect of the current drought is behind us. And for the remainder of this year slow down releases enough to effect no further drawdown.

Four, in the long-term environmental values and recreation, including fishing the upper basin must be afforded their deserved value and ranked much higher in priority by the Corps of Engineers in the operation of the reservoirs. It does not appear unreasonable that these benefits should be ranked at the same level as irrigation, domestic water supply, and other upstream beneficial consumptive uses second only to the purpose of flood control.

Senator Conrad and other members of the committee thank you for holding these hearings on this most critical issue and allowing us this opportunity to testify.

Senator CONRAD. Thank you, Richard. I appreciate you being here. And now we will hear from Floyd. Please proceed with your testimony.

STATEMENT OF FLOYD MATTHEW, SECRETARY, DEPARTMENT OF WATER AND NATURAL RESOURCES, STATE OF SOUTH DAKOTA

Mr. MATTHEW. We really appreciate being invited. I am going to keep my remarks short. This is a joint statement that Richard read.

We have been struggling for about 30 to 40 years with an institutional problem. And I am not sure that we put that institutional problem into focus with these deliberations. I am going to give the Corps some credit, because you know there has always been some conflict about how to resolve the disputes between the upper basin states and the lower basin states. And that is what we have here. Irrigation versus recreation, irrigation water intake and the problem that we have.

At least the Corps of Engineers has assumed the responsibility for making the tough decisions. Unfortunately, we in the upper basin don't feel that those decisions are made on an equitable basis necessarily. We think that the navigation interest may be getting a little more favor than we are when these problems develop. But at least the Corps has made the decision. And Dick said they have come in and they have helped us out at times.

But institutionally it may be necessary for us to develop some efficient way to refer the policy type decisions. And these are actually of a federal scale to some quasi-judicial entity.

Senator CONRAD. Let me ask you this. Would the North Dakota and South Dakota congressional delegation be an acceptable entity?

Mr. MATTHEW. I think I would like that. I do say this I think somehow or another that minority interests are going to have to be represented. We are definitely going to have to have a senator in

this group. And I don't know if we ever will develop an institutional structure whereby we can efficiently defer these disputes to some other entity. We struggle with a commission. And it is essentially why the commission went out of state. And we lost them. Because we dumped the responsibility for establishing policy on the Corps.

Now I think we should pick that commission concept up and blow the dust off of it and see whether or not we can come up with a quasi-judicial entity that probably could hear these disputes. And if we can't settle those disputes maybe we can hand them on to Congress in some way. And that is where ultimately the policy decisions are going to have to be made. I don't know how we do it. But I think that it is a challenge that we need to look at it. And it is definitely where the problem is. It is an institutional problem to me.

Senator CONRAD. One of the things we will be proposing in legislation that we will introduce on our return to Washington will clarify that recreation is a project purpose. Number two, it will establish an advisory group that meets with the Corps representing all of the interests. It will set out in law what that group is, who is represented, giving the Corps some place to turn for advice and input when making these decisions. I think what you say is quite correct. We may disagree strenuously with some of the decisions the Corps has made. I do. But I think we also understand they have been put in a very difficult position. They have been made the referee for all of this. And perhaps they are not the best ones. They are not necessarily the right institution to resolve these conflicts. I would be interested in your reaction to that.

Mr. MATTHEW. Frankly I don't think it would work. Until we establish an entity. And Congress is probably going to have to establish that entity that can establish and make decisions establish policy and make decisions. We are going to have to rely on the Corps of Engineers to make those decisions and set policies. An advisory committee hasn't worked in the past. And we have had several. We had have the Missouri Basin States Association. We have the Northern Lights Assembly. We had a proliferation of advisory type committees in the past. And frankly in my opinion, Senator, I don't think it will work. I think if we are going to set up an institutional structure whereby these disputes can be resolved efficiently without going to Court ultimately Congress is going to have to designate an entity that has authority over the Corps of Engineers. Now do we want to do that?

Another thing, I think we have to be very careful in about two areas. We talk about opening up the Master Manual for Operations. And we talk about establishing recreation as beneficial use. I definitely like the sound of that. But in the upper Missouri Basin states low cost power is also essential to the viability of our agricultural economy. And we don't want to do anything that upsets the integrity of the Pick-Sloan Plan and the cost of power to agriculture and our commercial and industrial uses in the upper Midwest.

Senator CONRAD. Let me follow-up with you on the advisory committee concept. Your experience with them has not been favorable. I think all of us have come away with the conclusion that earlier approaches haven't worked. But I am not talking about something

that is advisory in the sense that they merely meet. What I have in mind is an entity with some ability to referee these disputes—a legal ability to referee disputes. Our choice is to stick the Corps with this responsibility or find some other entity, which is perhaps quasi-judicial, to make these determinations; a body invested with power to make the policy decisions. What I heard you saying was that you would like to see something like that?

Mr. MATTHEW. Yes. And that is the key, I think it has to be a quasi-judicial entity that is designated the responsibility and delegated the authority to make the decision if we have a dispute over a Corps of Engineer policy. I don't know how it would work. And I am not sure we want to open that kind of a tiger up either. Because over the years the Corps has worked pretty well. If we can resolve this conflict of bias toward the navigation interest maybe the system will still work as it has in the past.

Senator CONRAD. That is the other major question. That is, what criteria apply? Are they set out clearly in law and regulation? If you read the operational objectives section of Master Manual, and we visited in length with General Hatch about this subject in Washington, recreation is barely mentioned. I think it is given five sentences in the whole Manual. In that section alone, the Manual has five pages on flood control and about a like amount on questions of navigation. We have clear sense of the Corps' priorities. Those priorities don't reflect current reality. General Hatch has agreed with that. So I think clearly we have made some progress with respect to an assessment of what is important.

Let me thank you both for participating here today. Please convey to the governor our appreciation for his involvement and his assistance in this matter.

Next we will have the Honorable Connie Parish, Mayor of Pick City; Reverend Dick Hendrickson, President of Garrison Civic Club; Steve Herman, owner of Twin City Marine, Bismarck; and Dennis Hill, the General Manager of the North Dakota Association of Rural Electric Cooperatives. If the members of that panel would come to the witness table we will proceed with your testimony.

Thank you for taking the time to be here. I understand that it is an inconvenience to take time out of your busy schedules to prepare testimony and to be here to share with us the views of your communities, and to outline what you see as the problems that we are having and what potential solutions are.

Let me again indicate that your full statements will be entered into the Record. If you care to summarize them, that is fine. However you choose to proceed is fine.

We will leave the Record open for two weeks for any additional views you would want to submit.

So, with that, we can start with Mayor Parish.

STATEMENT OF CONNIE PARISH, MAYOR, PICK CITY, ND

Mayor PARISH. I am a resident of Pick City, North Dakota and officially I serve as mayor of this community. I am appearing at this Hearing today on behalf of the businesses and citizens of Pick City. I believe that I also represent the interest of all North Dako-

tans who use the facilities associated with Lake Sakakawea for all purposes.

My primary objective is to convey information in a factual and objective manner which will highlight the impact that Lake Sakakawea has on the economy of Pick City, the water needs of Pick City, and the future growth however small it may be, of Pick City.

For those of you who do not know where Pick City is it is located on the south shore of Lake Sakakawea. It is adjacent to the North Dakota operated Lake Sakakawea State Park.

In regards to the economy of Pick City. The commerce of Pick City is substantially linked to the summer tourism trade in Lake Sakakawea State Park. Eighty percent of the employment within Pick City is linked to tourism which is wholly dependent on the recreation provided by Lake Sakakawea. This figure does not include the youth in Pick City who are employed by the state at the park.

During the summer of 1988 Lake Sakakawea State Park had over 200,000 visitors pass through its facilities. It is estimated that this level of tourist trade generated approximately \$1 million in revenue for the businesses in Pick City. This represents 85 percent of the annual business of this community. I might add it is necessary to make that level of business in the tourism time.

This year Pick City has suffered devastating economic losses. The businesses are reporting a 50 percent reduction in their staff which means they didn't have that much this year. Also they are reporting 50 percent decrease in their revenue. I think the picture is quite clear that Pick City cannot withstand another year like 1989. Losses of this magnitude can only spell economic collapse for Pick City.

The water needs of Pick City. We draw our water from the lake thanks to the Corps of Engineers. We utilize the intake structure to draw that water from the lake. In the past we have been able to use a smaller pump to pump this water up from the lake up that structure and up to Pick City. This year we have suffered \$17,000 worth of expenses to figure out what was wrong with our water system. That \$17,000 is not an easy amount for Pick City to put out. We have been forced to buy a larger pump to be able to supply the city with water due to the fact that the lake has dropped such drastic levels. We hope that with the installation of a larger pump Pick City will have ample water supply. However lake levels will be a constant concern until something is done to prevent unnecessary abuse and use of our water.

Growth in Pick City. I have been a resident of there for eight years. During that time I have seen many new businesses come in. I have seen the ones that exist there expand and grow. Growth is something that all North Dakotans want to see in their communities. However if something isn't done and isn't done right now there won't be a Pick City, North Dakota. Thank you very much.

[The prepared statement of Mayor Parish follows:]

Good-Morning

Senator Conrad, and United States Army Corp of Engineers,

My name is Connie Parish, I am a resident of Pick City, North Dakota and officially serve as mayor of this community. I am appearing at this hearing today, on behalf of the business² and the citizens of Pick City. I believe that I also represent the interest of all North Dakotans who use the facilities associated with Lake Sakakawea for all purposes.

My primary objective ~~in appearing here today~~ is to convey information in a factual and an objective manner, which will highlight the impact that Lake Sakakawea has on (#1) The Economy of Pick City, (#2) The Water needs of Pick City, and (#3) The Future Growth of Pick City.

For those of you who do not know where Pick City is, It is located on the South Shore of Lake Sakakawea adjacent to the North Dakota operated Lake Sakakawea State Park.

(#1) The Economy Of Pick City.

The commerce of Pick City is substantially linked to the summer tourism trade in Lake Sakakawea State Park. 80% of the employment within Pick City is linked to tourism which is wholly dependent on the recreation provided by Lake Sakakawea. This figure does not include the youth in Pick City who are employed by the State at the Park.

Page #2

During the summer of 1988, Lake Sakakawa State Park had over 200,000 visitors pass through its facility. It is estimated that this level of tourist trade generated One Million Dollars in revenue for the business in Pick City. This represents 85% of the annual business of this community.

This year Pick City has suffered devastating economic losses. The businesses are reporting a 50% loss of revenue and a 50% cut back of their employees. I think the picture is quite clear that Pick City cannot withstand another year like 1989. Losses of this magnitude can only spell economic collapse for Pick City.

(#2) The water Needs of Pick City.

From June to September of 1989 Pick City has paid out \$17,000.00 to solve our water supply problems. The problems are because of the low lake levels. We have been forced to purchase a new pump of larger capacity in order to supply the residents of Pick City water. It seems the old pump could not handle the additional pumping distance created by the low lake level. We hope that with the instalation of a larger pump, Pick City will have ample water supply. However lake levels will be a constant concern until something is done to prevent unnecessary abuse, and use of our water.

Page #3

(#3) Growth in Pick City.

I have been a resident of Pick City for Eight years. During that time I have seen many new businesses open up as well as the existing ones expand. Growth is something all North Dakotans want to see in their communities. However if something isn't done right now to stop the unnecessary abuse of our lake water and reverse the damaging publicity there will be a complete collapse of Pick City's economy.

Connie R. Parish
Rt 2 Box 234
Pick City, ND.
5854

Senator CONRAD. Thank you Mayor Parish. Yours is dramatic testimony that highlights very clearly the urgency of the situation we confront.

Next we will hear from the Reverend Dick Hendrickson, the President of the Civic Club of Garrison. Welcome. Please proceed.

**STATEMENT OF REV. DICK HENDRICKSON, PRESIDENT, THE
CIVIC CLUB OF GARRISON, ND**

Reverend HENDRICKSON. Thank you Senator Conrad. I am Dick Hendrickson representing the Garrison Chamber of Commerce. Garrison is a rural North Dakota community of about 1,700 people. And we are on the northeast end of Lake Sakakawea.

Garrison is a strong business community. I think we are fortunate in that our economy base is somewhat diverse. Like most rural North Dakotan towns we are heavily dependant on agriculture. Agriculture issues have a strong impact on all of us in Garrison. We also have people living in our area who work in a power plant like those at Falkirk and Beulah. Those industries are important to us as well. In the past few years we have also come to depend on tourism for our community's economic support. We have a great tourism resource with Lake Sakakawea. We have worked to attract people to our area to fish, to hunt, to camp and to enjoy the area. Economically that has been very good for Garrison.

Like many other small towns Garrison businesses work hard to survive. When any one of the pieces to our economy base is threatened our businesses are threatened. Our community is small enough that we cannot survive very long without all of those economic supports.

Our concern then over the low water level on Lake Sakakawea and the poor access to the lake is among other things an economic one. The low water level on the lake the past two summers has adversely affected our business community. Fort Stevenson State Park is at Garrison. A marina is there to dock boats and to sell gas and other related items. It is now unusable because of low water. Income at the marina in 1987 was around \$95,000. In 1988 that dropped 19 and one half percent to an income of \$76,433. This year, 1989 it dropped by 78 percent to an income of \$16,800. There was an income drop of over 82 percent in the last two years. The revenue loss affects businesses in town. Taxable sales in Garrison for the second quarter were down 3.89 percent from 1987 to 1988. That figure was down 12.34 percent from 1988 to 1989. That two year loss accounted for over \$300,000 loss in business. What makes that especially difficult for us is that statewide this years second quarter income was up 5.9 percent. That is understandable because this year is our state Centennial year. Related events have attracted tourists. Tourism should have been up in all places in the state. Unfortunately it was not in Garrison. I suppose we should feel fortunate because the Centennial did attract people to our area. The economic impact of the lake could have been worse. However it is hard to see the positive when we are being impacted negatively by this situation.

To finish the economic picture in Garrison, third quarter taxable sales figures continue the same downward trend. 1988 income figures were down 21.5 percent compared to 1987.

That adverse economic impact has hurt Garrison. Several important businesses have closed. Others are struggling. The low water level on Lake Sakakawea has hurt us all.

Somewhat different and yet related to this whole issue is the impact of the low water on cabin owners around the lake. Some of them depend upon the lake for water. As they have had to chase the water this year it has caused a financial burden. New hoses, new pumps, removing old pumps, and other related problems have cost people money. Now in most cases it has only been hundreds of dollars. But when you look at all of the cabin owners around the lake it adds up to a substantial financial loss.

If the water level of Lake Sakakawea continues to be low Garrison will continue to be adversely affected economically. More businesses will close. More and more will begin to struggle. And I assume other towns dependant on tourism for Lake Sakakawea are suffering in the same way. We know that there are a variety of issues to be handled in managing the Missouri River system. However in our area we feel we have had to carry the burden where others have reaped the benefits. We would hope that a more equitable plan could work to the benefit of us all. We cannot shoulder the burden much longer. We hope you can help us share the benefits. Thank you.

[The prepared statement of Reverend Hendrickson follows:]

Senator Conrad. Other members of the Subcommittee on Water and Power of the Senate Energy and Natural Resources Committee. I'm Dick Hendrickson representing the Garrison Chamber of Commerce. Garrison is a rural North Dakota community of about 1,7000 people. We're on the northeast end of Lake Sakakawea.

Garrison is a strong business community. I think we're fortunate in that our economic base is somewhat diverse. Like most rural North Dakota towns we're heavily dependent on agriculture. Agricultural issues have a strong impact on all of us in Garrison. We also have people living in our area who work in a power plant like those at Falkirk and Beulah. Those industries are important to us as well. In the past few years, we've also come to depend on tourism for our community's economic support. We have a great tourism resource with Lake Sakakawea. We've worked to attract people to our area to fish, to hunt, to camp and to enjoy the area. Economically, that's been very good for Garrison.

Like many other small towns Garrison businesses work hard to survive. When any one of the pieces to our economic base is threatened, our businesses are threatened. Our community is small enough that we can't survive very long without those economic supports.

Our concern, then, over the low water level on Lake Sakakawea and the poor access to the lake is among other things an economic one. The low water level on the lake the past two summers has adversely affected our business community. Ft. Stevenson State Park is at Garrison. A marina is there to dock boats and to sell gas and other related items. Income at the Marina in 1987 was around \$95,000. In 1988 that dropped 19 1/2% to an income of \$76,433. This year, 1989, dropped by 70% to an income

of \$16,800. There was an income drop of over 82% in these past two years. The revenue loss affects businesses in town. Taxable sales in Garrison for the second quarter (April, May, June) were down 3.89% from 1987 to 1988. That figure was down 12.34% from 1988 to 1989. That two year loss accounted for over \$300,000 worth of business. What makes that especially difficult for us is that state wide this year's second quarter income was up 5.9%. That's understandable because this year is our State Centennial. Related events have attracted tourists. Tourism should have been up in all places in the state. Unfortunately it was not in Garrison. I suppose we should feel fortunate because the centennial did attract people to our area. The economic impact of the lake could have been worse. However, it's hard to see the positive when we are being impacted negatively by this situation.

To finish the economic picture in Garrison, third quarter taxable sales figures (July, August, September) continued the same downward trend. 1988 income figures were down 21.5% compared to 1987.

That adverse economic impact has hurt Garrison. Several important businesses have closed. Others are struggling. The low water level on Lake Sakakawea has hurt us all.

Somewhat different and yet related to this whole issue is the impact of the low water on cabin owners around the lake. Some of them depend upon the lake for water. As they've had to chase the water this year it has caused a financial burden. New hose, new pumps, removing old pumps and other related problems have cost people money. Now, in most cases it's only been hundreds of dollars. But when you look at all of the cabin owners around the lake it adds up to a substantial financial loss.

If the water level of Lake Sakakawea continues to be low Garrison will continue to be adversely affected economically. More businesses will close. More and more will begin to struggle. We know that there are a variety of issues to be handled in managing the Missouri River System. However, in our area we feel we've had to carry the burden where others have reaped the benefits. We would hope that a more equitable plan could work to the benefit of us all. We can't shoulder the burden much longer. We hope you can help us share the benefits. Thank you.

Dick Hendrickson
Garrison, ND

Senator CONRAD. Thank you Dick Hendrickson. Next we will hear from Steve Herman who is the owner of Twin City Marine and a business leader in our community. Thank you very much for being here today. Please proceed with your testimony.

**STATEMENT OF STEVE HERMAN, OWNER, TWIN CITY MARINE,
BISMARCK, ND**

Mr. HERMAN. If you wouldn't mind I would like to approach and give you some exhibits ¹ that I have brought along.

Senator Conrad, it is a pleasure to be here and I particularly appreciate the opportunity to speak as one small business owner who has been dramatically affected. And I see other small business people dramatically affected by the low water level.

Let me first start by looking back 30 or more years when you and I were boys in Bismarck. And I am sure you remember how south Bismarck used to flood every spring and people's lives were destroyed by the flooding of their homes and their businesses. I am sure you do as many do in this room. The creation of the Garrison Dam brought a dream come true to many people which was the virtual elimination of flooding to southern Bismarck and points south. The creation of the Garrison Dam also fulfilled part of a commitment made by the U.S. Government. The Government promised us one of the many advantages we would receive from the dam would be flood control which no one can debate. The U.S. also said there would be located at the Garrison Dam a hydroelectric generating plant which would produce electricity. This, too, has been done. And the water produces electricity for millions of families and creates millions in revenue dollars.

The government made other commitments such as irrigation and recreation. These commitments unfortunately were not kept. For all the agriculture land we put under water we were given a commitment we would have a massive irrigation project. It now for all practical purposes has been abandoned. We never got what we were promised. We were promised recreation areas from Oahe up the Missouri to Lake Sakakawea. Many were never completed. And those which were completed are now semi-useless or abandoned. Another broken commitment. I know it sounds corny and it sounds a little old-fashioned but, Senator, you know as well as I do in this state a man's word is his bond. People live by that creed here. We expect and demand the U.S. Corps of Engineers to do the same, to live up to their commitments made over 40 years ago.

As Exhibit 1 which I have presented you with please review the photocopy of a booklet printed by the U.S. Corps of Engineers in February of 1955. It is entitled "Garrison District, Corps of Engineers, Department of the Army, Riverdale, North Dakota, Rules and Regulations Governing Public Use of Garrison Reservoir Area." Please review these copies and note they basically tell who and what can use the lake, from swimmer to campers to houseboats. Please pay particular attention to paragraph 18 on page four and the attached map. Paragraph 18 is headed Recreational Development Planning and it states the following and I quote, "the map

¹ Retained in subcommittee files.

on the following page shows the 21 areas planned for ultimate recreational development on the Garrison Reservoir. Of these 21 areas nine will be developed initially with the others to follow as public use and demand indicate a justified need therefore. The nine areas selected for initial development are," and then to spare some time here it just lists the Garrison Dam Recreation Area and goes down to Beaver Creek Fishing Camp. And then it states, "the public recreational areas developed by the Corps of Engineers will contain the following facilities: entrance and service roads and parking areas, camp and picnic areas with fireplaces, picnic tables, garbage containers and toilets, drinking water supply, a boat launching ramp, information services and signs."

In 1955, the Corps of Engineers made a commitment in this document. I do not see an expiration date anywhere in the document. One of their trade-offs for taking our land was the recreational areas stated earlier. It would appear to me in 1955 people were better off than today in that they had more usable recreation areas than we have today. And they had the promise of 12 more. Today we have few usable recreational areas with no optimism for more but even less than we now have.

Exhibit 2 is a map which was produced in the late 1950's to early 1960's by the Corps of Engineers. And it describes the history, the project, recreation, and other interesting points of the project. Please note the area of the brochure entitled Reservoir Recreation. It states the following and this is a direct quote, "The Missouri River is aptly known as the Big Muddy, but that identity will be lost in Garrison Reservoir. The long miles of lake between Garrison Dam will be clear, sparkling, blue water, ideal for fishing, boating, swimming, and camping during vacation time." The brochure goes on to say the following; "A study called the Master Recreation Plan is being developed in order that the fullest advantage may be taken of the potentialities for outdoor sports inherent in this man-made lake. This development will be made in the public interest and with the cooperation and advice of civic groups, federal, state and municipal agencies. When completed all necessary facilities for the enjoyment of the reservoir will be provided for the safety and convenience of visitors. In addition to plans for public recreation studies are being made in cooperation with other societies and agencies concerned for the preservation of the natural resources and establishment of a favorable habitat for the conservation of fish and wildlife in the project area."

I have many more documents to show, but in the interest of time I only submit these two as they clearly show what the intent of the Corps of Engineers was to be for recreation on the Missouri River and Lake Sakakawea.

It is absolutely ludicrous to me that the Army Corps of Engineers is now trying to walk away from their agreement. Senator Conrad, please take the message back to Washington that our members are growing by the day and the U.S. Government is not going to abandon the recreation commitment they made to this state and its people. I am, if nobody else will, putting the Corps of Engineers on notice that we are bound and determined to collect on the IOU they made to your and my parents. Under no excuse such as lack of funds or times are changing are we going to roll

over on this issue. The Corps intended on full recreational development of our water resource in exchange for our prime agricultural land. And now we want them to live up to that commitment.

There are businesses associated with water development which are virtually going broke as a result of the Corps of Engineers management of the water levels. In Bismarck, two marine dealerships have changed ownership in the last six months. And another has just announced a going out of business sale. People have a hard time buying boats when there is virtually no place to launch them or if launch becomes difficult. A large resort on Lake Sakakawea has recently shut its doors because the water has receded close to a mile away from their boat ramp and resort. Naturally, people expect water when they go to a lake resort. They expect to find some water. A marina at Fort Stevenson is closed as a result of no water which we heard earlier. Other marinas and resorts are in marginal economic shape as a result of the receding water levels. Current economic development on the water is being lost with no prospect of anything new being developed.

Exhibit 3 is a picture of Fort Stevenson Park which was taken five years ago of the marina. Today there is about a foot of water left in the bay that is unusable.

Senator CONRAD. Steve, if you would hold for a minute. There is in Exhibit 2 one ironic statement made in this Corps brochure. Let me give you this quote. "Although Garrison Dam is being constructed primarily to capture the flood waters of upper Missouri River the project will bring immeasurable wealth to North Dakota." Where is it?

Mr. HERMAN. You are going to have to tell me. I can't explain that.

Then, again, you have some pictures there, Exhibit 4 and 4A, the pictures of Indian Hills Resort west of the City of Garrison on the north side of the lake. These pictures were taken five years ago. And as you can see water came into a bay to the east which came to the north up by the road. The owner of this resort spent \$36,000 to make the bay deeper to the north so large houseboats and cruisers could be marinaed there. Exhibit 4A shows the bay to the west which came up to the campground and where a condominium complex was designed. It would add a substantial economic development to our state in that Garrison area if that were to happen. Both bays in these two pictures are now stone dry.

Exhibit 5 is aerial photos of Indian Hills as it existed as of a week ago today. You can see the bay to the east and north is gone and the bay to the west is also gone. The resort owner lost \$36,000 in a dry expansion. And the large boats lost a marina area. The condominium complex was scrapped as a result of the receding water level and as a result of the financial community unwilling, quite understandably so, to make a loan for a resort on a lake where you do not know where the water levels will be from year-to-year. Banks are unwilling to make loans to developers on the lake as they fear business failures from fluctuation in water levels. It is a certain fact that, I guarantee you as a private citizen and as a business person, the State of North Dakota will never see economic development through water recreation unless the Corps of Engineers does a better job of managing the water levels.

Exhibit 6 is a pictorial walk-through from the Bismarck-Mandan to Oahe Hazelton boat ramp to Oahe Beaver Bay camping area and boat ramp.

Pictures one through three of Exhibit 6 are of a privately owned marina in Mandan, North Dakota. This facility is for sale. And as can be seen the water is down to the point where it is almost impossible to get boats in and out of the water. Note in picture one how far down the boats sit from the boat dock. These docks are some three to four to five feet from those boats making them virtually useless. These docks used to be in the water. Also note the bay is slowly going dry. Now the question I have is how can these people expect to recover their lifelong investment when trying to sell a marina which is going dry?

Picture three shows the boat ramp exposed out of the water. Pictures four through six show another private marina in the Bismarck-Mandan area going dry. We only have two marinas in this town. They are both going dry. Please note the boats and docks getting drydocked along with the narrow inlet coming into the bay. Should these business people have to bear the burden of dredging at their own expense? These business people did not cause the fluctuating water level. Further, what chance of economic development is there in the future with these fluctuating levels? Who will risk a development in a situation such as this? As a result any chance of future economic development on the river becomes nonexistent. Economic development in this state gets stymied by the actions of the Corps of Engineers.

Pictures seven through 13 in Exhibit 6 are pictures of the Hazelton boat ramp, which is some 30 miles south of Bismarck. As can be seen by these pictures the ramp can be used on only one side and that side is very marginal as there are low water obstacles preventing launch. In this series of photos you can see a fisherman is unloading and loading on the shoreline next to the ramp which is certainly primitive by any standards. You can see how far the dock is out of the water making it almost totally useless. Picture 13 shows a stumped area which was completely under water three to four years ago and is dry today.

Pictures 14 through 27 show what was once a beautiful camping and fishing area on Lake Oahe Beaver Creek. These pictures show the dry boat ramps, the beautiful campground, which it certainly is, the cabin sites people built to be near the water only to be looking at a desert, and the water line which was on a bridge crossing over Beaver Bay and the little trickle of a stream which exists today. This entire area is desolate and cold, high and dry with thousands if not millions of federal dollars invested in a camping and fishing area now at least two miles from water access. A few years ago, the state and, I assume, the federal government at great expense paid for a paved highway leading to this campsite as a result of all the tourists and boaters that were using the areas then when the water was there. Today the site sits empty, waiting for a rising water level which may never come. Who reimburses the State of North Dakota for the lost tourism dollars and the expense for the highway? Who reimburses the families who built the cabin sites which are now sitting in the middle of the prairie which were once near the water? Who reimburses all the businesses for lost

revenue from bait and tackle sales, boat and equipment sales, et cetera? The U.S. Government in my opinion bears as much responsibility in this matter as they did in paying additional money to the Indians for the Black Hills a few years ago.

What happens to these abandoned campgrounds? What does the Corps plan to do to replace them? Do we finally get the modern facilities we were promised in 1955 or do we get primitive sites with just enough to give us minimal access to the river and lake?

Senator Conrad, the Corps of Engineers must be told how much impact recreation has on our economy. I do not believe they understand the devastating harm they are doing to the recreation business in this state. We know for a fact a good water resource with modern facilities and access creates tourism dollars for our state. We also know substandard facilities and access cost our state tourism dollars. In North Dakota alone we have more than 41,000 boats, the majority used for fishing. North Dakotans spend \$15 million annually on new boats, almost \$10 million on outboard motors, over \$1 million on boat trailers and over \$4 million on accessories, including depth finders and trolling motors.

There are more than 40 marine dealers in North Dakota plus 86 stores specializing in fishing and hunting gear. All employed people whose wages contribute toward North Dakota's economy. During fiscal year 1988 North Dakotans purchased 161,375 fishing licenses. And non-residents bought 20,000 fishing licenses. Fishermen spend \$1.3 million in license fees alone last year. As reported by Tony Dean, a North Dakota native but now making his home in Pierre, I have to add that for the people from South Dakota here. Fishing, according to a recent study, is the favorite outdoor activity of Americans, ranking far ahead of golf, softball, tennis, jogging, and other outdoor pastimes. It has been reported 40 percent of all of our residents fish. Per capita this ranks us near the top in the North Central Region.

The business of recreation is big business. And the Corps of Engineers is quickly bankrupting our recreation industry with its lack of funding and understanding of our need for them to live up to the commitment they made to recreation in the 1940's and 1950's.

Kent, time is of the essence and we are looking to you and your committee to make certain the Corps of Engineers is given a mandate to give this state and its people the immediate and permanent water improvements it justly deserves. Thank you again for the opportunity to appear here.

[The prepared statement of Mr. Herman follows:]

TESTIMONY OF STEVE HERMAN
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
OF THE UNITED STATES SENATE COMMITTEE ON
ENERGY AND NATURAL RESOURCES

October 9, 1989

Mr. Chairman and Members of the Subcommittee,

I appreciate being invited to give testimony at this hearing and if you don't mind, I might go over the ten minutes I was allotted.

Let me first start by looking back 30 or more years when you and I were boys in Bismarck. Remember how south Bismarck used to flood every spring and peoples lives were destroyed by the flooding of their homes and businesses? I am sure you do, as many do in this room. The creation of the Garrison Dam brought a dream come true to many people which was the virtual elimination of flooding to southern Bismarck and points south. The creation of the Garrison dam also fulfilled part of a commitment made by the U.S. Government. The Government promised us one of the many advantages we would receive from the dam would be flood control which no one can debate.

The U.S. Government also said there would be located at the Garrison Dam a hydro electric generating plant which would produce electricity. This, too, has been done and the water produces electricity for millions of families and creates millions in revenue dollars.

The Government made other commitments such as irrigation and recreation. These commitments unfortunately were not kept. For all the agriculture land we put under water, we were given a commitment we would have a massive irrigation project. It now, for all practical purposes, has been abandoned. We never got what we were promised. We were promised recreation areas from Oahe up the Missouri to Lake Sakakawea. Many were never completed and those which were completed are now semi-useless or abandoned. Another broken commitment. I know it sounds corny and old fashioned but Senator, you know as well as I do, in this state, "a man's word is his bond." People live by that creed here. We expect and demand the U.S. Corps of Engineers to do the same, to live up to their commitments made over 40 years ago.

As Exhibit One, please review the photo copy of a booklet printed by the U.S. Corps of Engineers in February of 1955, it is entitled "Garrison District, Corps of Engineers, Department of the Army, Riverdale, North Dakota, Rules and Regulations Governing Public Use of Garrison Reservoir Area." Please review these copies and note they basically tell who and what can use the lake, from swimmers to campers to houseboats. Please pay

particular attention to paragraph 18 on page four and the attached map. Paragraph 18 is headed "Recreational Development Planning" and it states, "The map on the following page shows the 21 areas planned for ultimate recreational development on the Garrison Reservoir. Of these 21 areas, 9 will be developed initially with the others to follow as public use and demand indicate a justified need therefore. The 9 areas selected for initial development are:

- a. Garrison Dam Recreation Area
- b. Outlet Works Fishing and Picnic Area
- c. Highway 83 Fishing Camp
- d. Fort Stevenson Recreation Camp
- e. Douglas Creek Fishing Camp
- f. Sanish Recreation Area
- g. Lewis and Clark Recreation Area
- h. Tobacco Garden Creek Recreation Area
- i. Beaver Creek Fishing Camp

Public recreational areas developed by the Corps of Engineers will contain the following facilities:

- a. Entrance and service roads and parking areas
- b. Camp and picnic areas with fireplaces, picnic tables, garbage containers and toilets
- c. Drinking water supply
- d. A boat launching ramp

e. Information services and signs

In 1955, the Corps of Engineers made a commitment in this document. I see no expiration date anywhere in the document. One of their trade outs for taking our land was the recreational areas stated earlier. It would appear to me in 1955, people were better off than today in that they had more useable recreation areas than we have today and they had the promise of 12 more. Today, we have few useable recreation areas with no optimism for more but even less than we have now.

Now please look at Exhibit 2. It is a map which was produced in the late fifties to early sixties by the Corps of Engineers and it describes the history, the project, recreation and other interesting points of the project. Please note the area of the brochure entitled "Reservoir Recreation." It states the following, "The Missouri River is aptly known as the 'Big Muddy' but that identity will be lost in Garrison Reservoir. The long miles of lake behind Garrison Dam will be clear, sparkling, blue water, ideal for fishing, boating, swimming and camping during vacation time." The brochure goes on to say the following, "A study called the Master Recreation Plan is being developed in order that the fullest advantage may be taken of the potentialities for outdoor sports inherent in this man-made lake. This development will be made in the public interest and with the cooperation and advice of civic groups, federal, state and municipal agencies. When completed, all necessary

facilities for the enjoyment of the reservoir area will be provided for the safety and convenience of visitors. In addition to plans for public recreation, studies are being made, in cooperation with other societies and agencies concerned for the preservation of the natural resources and establishment of a favorable habitat for the conservation of fish and wildlife in the project area."

I have many more documents to show but in the essence of time, I only submit these two as they clearly show what the intent of the Corps of Engineers was to be for recreation on the Missouri River and Lake Sakakawea.

It is absolutely ludicrous the Army Corps of Engineers is now trying to walk away from their agreement. Senator Conrad, please take the message back to Washington, D.C. that our numbers are growing by the day and the U.S. Government is not going to abandon the recreation commitment they made to this State and its people. I am putting the Corps of Engineers on notice that we are bound and determined to collect on the "I owe you" they made to yours and my parents. Under no excuse such as "lack of funds" or "times are changing" are we going to roll over on this issue. The Corps intended on full recreational development of our water resource for exchange for our prime agricultural land and now we want them to live up to that commitment.

There are businesses associated with water development which are virtually going broke as a result of the Corps of Engineers management of the water levels. In Bismarck, two marine dealerships have changed ownership in the last six months and another has just announced a "going out of business sale." Do you think people want to buy boats with low water levels? A large resort on Lake Sakakawea has recently shut its doors because the water has receded close to a mile away from their boat ramp and resort. Naturally, people expect water when they go to a "lake" resort. A marina at Fort Stevenson is closed as a result of no water. Other marinas and resorts are in marginal economic shape as a result of the receding water levels. Current economic development on the water is being lost with no prospect of anything new being developed.

Please review Exhibit 3. This is a sunset picture taken five years ago of the marina at Fort Stevenson Park. Today, you could use it for a parking lot. It is totally dry. Exhibit 4 and 4A are pictures of Indian Hills Resort west of the city of Garrison and on the north side of Lake Sakakawea. The two pictures were taken five years ago and as you can see, water came into a bay to the east which came to the north up by the road. The owner of this resort spent \$36,000 to make the bay deeper to the north so large houseboats and cruisers could be marined there. Exhibit 4A shows the bay to the west which came up to the camp ground and where a condominium complex was designed. Both bays in these two pictures are now stone dry.

Exhibit 5 are aerial photos of Indian Hills as it existed as of a week ago today. You can see the bay to the east and north is gone and the bay to the west is also gone. The resort owner lost \$36,000 in a dry expansion and the large boats lost a marina area. The condominium complex was scraped as a result of the receding water level and as a result of the financial community unwilling to make a loan for a resort on a lake where you do not know where the water level will be from year to year, banks are unwilling to make loans to developers on the lake as they fear business failures from fluctuation in water levels. It is a certain fact the State of North Dakota will never see economic development through water recreation unless the Corps of Engineers does a better job of managing the water levels.

Exhibit 6 is a pictorial walk through from Bismarck-Mandan to Oahe Hazelton Boat Ramp to Oahe Beaver Bay Camping area and boat ramp.

Pictures 1 through 3 are of a privately owned marina in Mandan, North Dakota. This facility is for sale and as can be seen, the water is down to the point where it is almost impossible to get boats in and out of the water. Note in picture 1 how far down the boats sit from the boat dock. These docks used to be in the water. Also note the bay is slowly going dry. How can these people expect to recover their life-long investment when trying to sell a marina which is going dry? Picture 3 shows the boat ramp exposed out of the water. Pictures 4 through 6 show

another private marina going dry. Please note the boats and docks getting dry docked along with the narrow inlet coming into the bay. Should these business people have to bear the burden of dredging at their own expense? These business people did not cause the fluctuating water level. Further, what chance of economic development is there in the future with these fluctuating levels? Who will risk a development in a situation such as this? As a result, any chance of future economic development on the river becomes nonexistent. Economic development in this State gets stymied by actions of the Corps of Engineers.

Pictures 7 through 13 are pictures of the Hazelton Boat Ramp. As can be seen by these pictures, the ramp can be used on only one side and that side is very marginal as there are low water obstacles preventing launch. In this series of photos, you can see a fisherman is unloading and loading on the shore line next to the ramp which is certainly primitive by any standards. You can see how far the dock is out of the water making it almost totally useless. Picture 13 shows a stumped area which was completely under water three to four years ago.

Pictures 14 through 27 show what was once a beautiful camping and fishing area on Lake Oahe Beaver Creek. These pictures show the dry boat ramps, the beautiful camp ground, the cabin sites people built to be near the water only to be looking at a desert, and the water line which was on a bridge crossing over

Beaver Bay and the little trickle of a stream which exists today. This entire area is desolate and cold, high and dry with thousands if not millions of federal dollars invested in a camping and fishing area at least two miles from water access. A few years ago, the State, at great expense, paid for a paved highway leading to this camping site as a result of all the tourists and boaters to this area. Today, the site sits empty waiting for a rising water level which may never come. Who reimburses the State of North Dakota for the lost tourism dollars and the expense for the highway? Who reimburses the families who built the cabin sites which are now sitting in the middle of the prairie which were once near the water? Who reimburses all the businesses for lost revenue from bait and tackle sales, boat and equipment sales, etc? The U.S. Government bears as much responsibility in this matter as they did in paying additional money to the Indians for the Black Hills.

What happens to these abandoned camp grounds? What does the Corps plan to do to replace them? Do we finally get the modern facilities we were promised in 1955 or do we get primitive sites with just enough to give us minimal access to the river and lake?

Senator Conrad, the Corps of Engineers must be told how much impact recreation has on our economy as I do not believe they understand the devastating harm they are doing to the recreation

business in this State. We know a good water resource with modern facilities and access creates tourism dollars for our State. We also know substandard facilities and access costs our State tourism dollars. In North Dakota alone, we have more than 41,000 boats, the majority used for fishing. North Dakotans spend \$15 million annually on new boats; almost \$10 million on outboard motors; over \$1 million on boat trailers and over \$4 million on accessories including depth finders and trolling motors.

There are more than 40 marine dealers in North Dakota plus 86 stores specializing in fishing and hunting gear. All employ people whose wages contribute toward North Dakota's economy. During fiscal year 1988, North Dakotans purchased 161,375 fishing licenses and nonresidents bought 20,000 fishing licenses. Fisherman spent 1.3 million dollars in license fees last year. As reported by Tony Dean, a national outdoor writer and celebrity: Fishing, according to a recent study, is the favorite outdoor activity of Americans, ranking far ahead of golf, softball, tennis, jogging and other outdoor pastimes. It has been reported forty percent of all our residents fish. Per capita, this ranks us near the top in the North Central region.

The business of recreation is big business and the Corps of Engineers is quickly bankrupting our recreation industry with its lack of funding and understanding our need for them to live up to the commitment they made to recreation in the 1940's and

1950's. Senator, time is of the essence and we are looking to you and your committee to make certain the Corps of Engineers is given a mandate to give this State and its people the immediate and permanent water improvements it justly deserves.

Thank you, again, for the opportunity to appear before your committee.

Senator CONRAD. Thank you for that excellent testimony as well as the Exhibits that make very clear the kind of dramatic effects we have experienced as a result of a lake level that is 20 feet below average. Obviously, the effects have been devastating. I hope I can get copies of these pictures.

Mr. HERMAN. They are yours.

Senator CONRAD. We would like to make them part of the Record. I think it will show dramatically to our colleagues the affect of the dropping lake level.

Next we will hear from Dennis Hill, the general manager of the North Dakota Association of Rural Electric Cooperatives. Welcome Dennis and proceed with your testimony.

STATEMENT OF DENNIS HILL, GENERAL MANAGER, NORTH DAKOTA ASSOCIATION OF RURAL ELECTRIC COOPERATIVES

Mr. HILL. Thank you Senator. And I appreciate this invitation to be part of this proceeding today. And thank you for bringing this proceeding to North Dakota. I think it is important that we bring this to our own backyard so that we can hear about the impacts on North Dakota in North Dakota rather than making all of these concerned citizens have to travel to Washington, D.C. It was very kind of you and we appreciate that.

On behalf of the 76,000 rural electric consumers in the State of North Dakota I want to say that we are deeply concerned about the low run-off and resulting low lake levels of the reservoirs of the Pick-Sloan project. We are concerned because the low lake levels put rural electric consumers in North Dakota in what we see as a lose-lose position.

We first lose because low run-off has caused significant cuts in the amount of hydroelectric power that's being produced from the dams along the Missouri River. In an average year, some 10 billion kilowatt hours of electricity is generated. Last year that total was 8.8 billion. And this year projections call for generation of about 7.7 billion kilowatt hours.

When generation falls, the Western Area Power Administration is forced to buy power from area utilities to make up the difference in its hydroelectric supply from what it has contracted to sell. Last year Western Area Power Administration estimates it spent some \$16 million on power purchases.

So basically when Western Area Power Administration has to purchase power to meet contractual obligations it puts pressure on Western Area Power Administration's ability to keep rates stable. And when Western Area Power Administration raises its rates the rural electric cooperative has two options. Try and absorb the increase or pass the Western Area Power Administration increase onto consumers in the form of higher rates.

With rate stability being a number one concern of rural electric cooperative consumers these days we are therefore quite concerned when we see the low run-offs and resulting low water levels putting upward pressure on what Western Area Power Administration must charge its preference customers, the rural electric cooperatives and the ten consumer owned municipal power systems in North Dakota. Co-ops depend on Western Area Power Administra-

tion to supply from 25 to 70 percent of their wholesale power supply and blend this lower priced hydroelectric with higher priced coal-fired power to keep rates as competitive as possible. So reduced generation takes away an important source of power for consumers. And the longer it remains reduced the more pressure it puts on the rate.

In addition to this pressure on rates on the wholesale side we also see the low water levels putting us in a lose situation on the retail side. We are losing valuable customers.

Already, KEM Electric Cooperative based in Linton reports sales to irrigators dropped 45 percent this year which reduced irrigation revenues by \$35,000. KEM also saw a 21 percent drop in revenues from recreation commercial accounts along Lake Oahe and a 3.5 percent drop in revenue from cabin accounts. The reason of course is that Lake Oahe is so low that irrigators cannot get to the water anymore. And the recreation and cabin users have also stopped visiting the area.

Around Lake Sakakawea we are also losing customers. Slater's Resort is a member of McKenzie Electric Cooperative. If it doesn't operate next year McKenzie Electric will lose those retail sales and will be forced to have its remaining customers pay for the debt it incurred when it built a powerline down to the resort.

McLean Electric based in Garrison reported last week it had received a call from the Minot Yacht Club based at Fort Stevenson to remove the electric meter at the marina. The reason: with no water in the marina there are no boats moored there and thus no need for the conveniences electricity used to provide for those sailors. The concession stand based there for the past few years is also threatened.

We fear similar circumstances around the lake. Rural electric cooperatives serve the resorts, cabins, and campgrounds around the lake. For each established customer we lose or each potential new load that never materializes the remaining rural electric cooperative customers are forced to pay for the remaining investment. That puts pressure on the rate.

So the low run-offs and resulting low water levels are putting pressure on our wholesale power costs. And on the retail side we are losing important irrigation and recreation sales. That's a lose-lose situation, Senator, a situation we would like to work out of sooner than later.

Thank you for the chance to appear at this Hearing.
[The prepared statement of Mr. Hill follows:]

Testimony of

Dennis Hill, executive vice president and general manager
North Dakota Association of Rural Electric Cooperatives

before the Subcommittee on Water and Power,
Senate Energy and Natural Resources Committee,

on Monday, Oct. 9, State Capitol, Bismarck North Dakota.

Honorable Bill Bradley, chairman

Honorable Kent Conrad, vice chairman, presiding

For the record, my name is Dennis Hill. I'm executive vice president and general manager of the North Dakota Association of Rural Electric Cooperatives, headquartered in Mandan, N.D. Our association represents 20 of the state's 21 rural electric cooperatives and six generation and transmission cooperatives that either serve or are based in North Dakota. Our rural electric family delivers electric power to 76,000 North Dakotans.

I also want to thank you, Sen. Conrad, for bringing this important hearing to Bismarck. The issue we're discussing today impacts a great many North Dakotans, and we most appreciate being able to tell you about the impacts on North Dakota in North Dakota.

On behalf of the rural electric consumers, I want to say that we're deeply concerned about the low runoff and resulting low lake levels. We're concerned because the low lake levels put rural electric consumers in North Dakota in a loss-loss position.

We first lose because low run-off has caused significant cuts in the amount of hydroelectric power that's being produced from the dams along the Missouri River. In an average year, some 10 billion kilowatt hours of electricity is generated from the Pick Sloan dams. Last year, that total was 8.8 billion, and this year, projections call for generation of about 7.7

billion kilowatt hours.

When generation falls, the Western Area Power Administration is forced to buy power from area utilities to make up the difference in its hydroelectric supply from what it has contracted to sell. Last year, WAPA estimates it spent some \$16 million on power purchases.

So basically, when WAPA has to purchase power to meet contractual obligations, it puts pressure on WAPA's ability to keep rates stable. And when WAPA raises its rates, the rural electric cooperative has two options: try and absorb the increase or pass the WAPA increase onto consumers in the form of higher rates.

With rate stability being a number one concern of REC consumers these days, we're therefore quite concerned when we see the low run-offs and resulting low water levels putting upward pressure on what WAPA must charge its preference customers, the rural electric cooperatives and the 10 consumer-owned municipal power systems in North Dakota. Co-ops depend on WAPA to supply from 25 to 70 percent of their wholesale power supply, and blend this lower-priced hydroelectric power with higher-priced coal-fired power to keep rates as competitive as possible. So reduced generation takes away an important source of power for consumers, and the longer it's reduced, the more pressure it puts on the rate.

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cabin accounts. The reason, of course, is that Lake Oahe is so low that irrigators can't get to the water anymore, and the recreation and cabin users have also stopped visiting the area.

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We fear similar circumstances around the lake. RECs serve the resorts, cabins and campgrounds around the lake. For each established customer we lose or each potential new load that never materializes--the remaining REC customers are forced to pay for the remaining investment. That puts pressure on the rate.

So the low run-offs and resulting low water levels are putting pressure on our wholesale power costs. And on the retail side, we're losing important irrigation and recreation sales. That's a loss/loss situation, Senator, a situation we'd like to work out of sooner than later.

Senator CONRAD. Thank you. That provides another perspective to all of this, one which is terribly important for all of us to understand as we attempt to deal with this situation. I want to thank you for taking the time to be here and providing that perspective for us.

Let me ask this panel a question, and any one of you or all of you could answer it. If you had the opportunity to ask one question of the Corps what would that question be?

Mr. HERMAN. That I would be disappointed it would only be one question.

The first question I would ask is that relating to transportation. As you know I am also involved with the transportation industry. Transportation concerns in moving of surface goods we pay an excise tax for all of our fuel which goes into a highway trust fund for the use of construction and improvement of roads. In addition to that because we make our living from the highways and we recognize that, we pay a highway user tax, some \$3,100 to \$3,200 a year per unit. That goes into the highway trust fund for the maintenance and construction of highways.

I would ask the Corps this question then. Why can't—if barge traffic is such critical issue in transportation down south—why can't there be a water user tax of which those funds would be dedicated to a fund which would be for the enhancement of recreation areas and boat ramps upstream? Now if these people in the water system are as concerned up north as they say they are they don't want to do any damage. And it is interesting, because there is a quote here by the vice-president of James R. Smith, the vice-president of the Mississippi Valley Association before the House Interior and Insular Affairs Subcommittee on House Bill 7068 Garrison Diversion Devils Lake, North Dakota October 30, 1957. And he states that perhaps the greatest single benefit from the Missouri Basin Development Program to the upper basin states is the conservation of water for irrigation. And then he goes on and he states and certainly this goes back to the 1950's, "In conclusion may I say that citizens in the lower basin recognize that under the O'Mahoney-Millikin Amendment irrigation has a prior claim on water arising in the upper basin when shortages might exist that would require the curtailment of water transportation."

He is speaking for a very strong Mississippi Valley Association which had a lot on the development of these various acts and amendments that came about in the 1950's. They will not challenge any interpretation of the law which grants that priority for they willingly accept it was enacted in 1944.

So if that is the case, when we go back to when all this plan was laid out, then those people today must understand that they must pay a water users tax to be dedicated for this sincere concern that they did show when the act was amended.

Senator CONRAD. Anyone else? A question that you would put to the Corps if you had an opportunity?

All right, thank you very much for your taking the time to participate here today. We appreciate it very much. It has been very useful in terms of fleshing out the Record for the committee as it deliberates on how to proceed when we return.

Next we will call our final formal witness, Brigadier General Robert Ryan, USA Division Engineer, Missouri River Division, U.S. Army Corps of Engineers. Welcome.

I want to indicate this is Columbus Day and it is a federal holiday. General Ryan had plans with his family which he curtailed in order to be here with us today. We are very grateful to him for doing that and for his assistance in our efforts to work together on solutions to the problem that we face.

Welcome and proceed.

STATEMENT OF BRIG. GEN. ROBERT H. RYAN, ARMY CORPS OF ENGINEERS, MISSOURI RIVER DIVISION, ACCOMPANIED BY DUANE SVEUM, CHIEF, RESERVOIR CONTROL CENTER, MISSOURI RIVER DIVISION; AND DOYLE OWENS, CHIEF OF OPERATIONS, OMAHA DISTRICT

General RYAN. I am pleased to be here. In response to your initial comment I would say I am a soldier. I am here 24 hours a day seven days a week. And I am pleased to do my duty. And I am proud to be here and have a chance to meet before your committee.

Senator CONRAD. We do appreciate the sacrifice. We would hope to accommodate everybody's schedule. It just became impossible trying to put together all of the witnesses' schedules. But we do very much appreciate your presence.

General RYAN. Before I go into my formal testimony I would like to read an extract from a conference proceeding the Pick-Sloan Missouri Basin Plan which took place in Des Moines, Iowa, August 10, 11, 1983. And this is an important document. It includes a summary of people who are involved in the early development of the Pick-Sloan Plan and other aspects. This particular proceeding was chaired by Vern Vahey. I think Vern is here today. He was the moderator. And the speaker in this case was a Mr. Warren Newfelt, who is Secretary of South Dakota Water and Natural Resources.

As a part of his presentation he quoted from Senate Document 191 which was a Sloan document appropriated to the Pick-Sloan Plan of 1984. And I will quote man cannot prevent the sudden downpours nor the quick thaws that produce floods. He can only distribute flood waters in time and place and so reduce the destructive powers. He cannot prevent droughts or make rainfall at will. He can only store water for use in dry seasons and thus escape its worse affects. The plan proposed here and that is the Pick-Sloan Plan recognizes these facts and also the facts that in order to make the water of the Missouri Basins serve the greatest number of people to the greatest advantage those waters must be conserved and used according to a coordinated plan which must recognize all beneficial use of the water, weigh their relative values and make a compromise from a basin-wide viewpoint in each instance of conduct. That was a part of the Senate Docket 191, part of the Pick-Sloan original document.

And it seems to me to set an appropriate historical background for our discussion here today. I turn now to my formal statement.

Mr. Chairman and members of the subcommittee, I am Brigadier General Robert H. Ryan, Division Engineer of the Missouri River

Division, U.S. Army Corps of Engineers. Accompanying me are Mr. Duane Sveum, Chief Reservoir Control Center of the Missouri River Division and Mr. Doyle Owens Chief of Operating Omaha District. I am pleased to appear today on behalf of the Assistant Secretary of the Army for Civil Works to discuss Missouri River mainstem regulation, the lake values that have resulted during this drought period and in particular the level of Lake Sakakawea.

My statement at your hearing held in Parshall, North Dakota on August 25, 1989 addressed the authorization of the Garrison Project and its historic contribution to the many purposes it supports. I will not repeat the statements made at that Hearing except to restate that the reservoirs in the system were authorized and are regulated to support flood control, navigation, hydropower, irrigation, municipal and industrial water supply, water quality, recreation, and fish and wildlife. These purposes are listed on chart one which also shows a profile of the mainstem Missouri River system and the storage capacity of each of the six reservoirs.

I would like to describe briefly the current hydrologic conditions, the Missouri River Mainstem Reservoir Master Manual, our water control management procedures, and how Garrison Dam is regulated in concert with the other five reservoirs on the Missouri river mainstem. I will also discuss what we are doing to address the impact of the low lake levels.

Turn now to drought conditions. The drought we are now experiencing is the most severe drought we have had in the past three decades. It is having a significantly greater impact on the Missouri River mainstem reservoir system than the earlier two year drought we experienced from 1980 through 1981. Run-off to the Missouri River mainstem upstream from Sioux City is below normal for the third year in a row. This is graphically demonstrated on chart two. The 1988 run-off was only half of the normal run-off. It was equal to the low run-off of 1961 which at that time was the lowest run-off since 1940.

The Missouri River Mainstem Reservoir Master Manual, which I shall refer to as the Manual, is the document that describes how the reservoir system will be operated at all times, including times of drought and flood. During its development the Manual was reviewed by a committee composed of representatives from the affected federal agencies and representatives appointed by the governors of the ten basin states. The Manual was last published in 1979 and it is presently being reviewed due to river basin changes over the last ten years as we address that system. The regulation criteria presented in the Manual lists the regulation priorities. These priorities were reviewed during the question and answer period at the Hearing in Parshall, North Dakota on August 25, 1989. I would like to summarize them. Section nine of the Manual which is the chapter on Multiple Purpose Regulation lists the priorities as follows: Number one, flood control; number two, irrigation and other upstream water uses for beneficial consumptive purposes; number three, downstream municipal and industrial water supply and water quality requirements; number four, Gavin's Point releases scheduled to provide equitable service to navigation and power; number five, releases from the projects upstream from Gavin's Point will be adjusted for the efficient generation of power; and

number six, without serious interference with the foregoing functions the reservoirs will be operated for maximum benefit to recreation and fish and wildlife.

It can be noted from the list of priorities that navigation and power are given preference over recreation and fish and wildlife. However, as a result of the drought we have instituted conservation measures as prescribed in the Manual which reduce project releases. These conservation measures provide continued, but at reduced levels to high priority project purposes during a long-term drought. These conservative measures also result in higher lake levels. That would be the case without conservation measures.

Releases for hydropower and navigation have been reduced as the reservoir storage diminishes through conservation measures. We did not provide full service flows to navigation or to power in 1988 or 1989 because of reduced lake levels. For example, the opening of the navigation season was delayed by one week. Navigation releases have been discontinued 30 days earlier than normal and power releases this winter will be lower than normal. The quantity of water released for navigation and power is based on the volume of stored water remaining in the system, the lesser the volume of storage, the lesser the amount released in support of navigation and hydropower. As a result of the conservation measures the volume of water released in 1989 will total approximately 81 percent of the average annual release. This is demonstrated on Chart three. I do have some corrections to make on Chart three. I will submit those to you for the Record. There is adjustment in the upper chart on Chart three. It reduces the right-hand bar estimated 1989 releases to a total of 13.5 million acre feet down to 2.9 million acre feet.

Senator CONRAD. Can I just stop you there. This is an area of great concern and controversy. At the Hearing in Parshall I think you indicated that releases were down 17 percent this year over the ten year average. That is, I recall, the testimony. What you are showing here would be averages that are over what period?

General RYAN. Twenty year period. 1967 to 1987.

Senator CONRAD. Let me just draw your attention to this chart. This is what confuses people. And I think concerns them.

On the one hand we are shown these numbers that show in terms of the average releases over an extended period of time in this case, 20 years, we are down in terms of the releases from Garrison. Then we look at these month to month numbers. And I think it raises a real question. This is for the most recent months, May, June, July, August. We don't yet have the September numbers as I understand it. I am advised that that number is 12.9. So that one would be down, too.

If you look at these numbers for May, 20.7 in 1989. That is the highest release level in seven years. June, 22.4, the highest release level in seven years. July, 22.4, the highest release level in seven years. August, 21.8, the highest in three years.

Why are we having higher releases in these months when we are in the midst of a drought? With all of the concern about what is happening to the level of the lakes, why do we see this pattern?

General RYAN. Senator, it has to do with the over-all priority which are identified for releases from this project. It has to do with

the inflows that occur in the sections below the control sections, that is below Gavin's Point Dam with regard to the flows for navigation in that lower river section. And it has to do with in your case you have picked the last seven years. If you go back for a longer period to the 23 years from 1969 to 1987 you will find that the releases in May of 20.7 is actually 14 in a list of 23 if they are ranked in order of level of importance. That the release for June is 12 in the list of 23. That the release for July is number 10 in the list of 23. And the release for August is nine in the list of 23. So you see in that list of 23 years they are very close to median. Now we do also——

Senator CONRAD. Let me ask you this.

General RYAN. May I continue please?

Senator CONRAD. Let me just ask you this question. I understand the point. But these are the years of drought.

General RYAN. Yes.

Senator CONRAD. And in these years of drought what we see are release levels in these months which are the highest in the years depicted here. That is what I think people wonder about. A lot of people are very unhappy when they see the level of the lake down 20 feet over its average. And yet in these most recent months we have got higher release levels. I hear your answer. Your answer, apparently, is that we are a lower priority?

General RYAN. Your priority that you are addressing, Senator, is the issue of lake level for whatever purpose. And the purpose that you are addressing I assume is recreation. The point is that we do it in accordance with the Master Manual. And as I read off the priorities, the priority which is number six is without serious interference to the foregoing functions the reservoir will be operated for maximum benefit to the recreation of fish and wildlife. Which speaks to the issue of releases for navigation to support that.

Now overall from the entire mainstem our releases for 1989 are the lowest of any year in that 23 year period. So while you have picked a particular month and these can be the recreation months that you selected. And you have picked a particular set of years. You look at the more complete record you will find that the releases for '89 are the lowest of any period since the dams have all been filled and the average annual releases. And also that the releases for the months you picked for Garrison Dam are really about at the median in those 23 years.

Senator CONRAD. But doesn't that miss the point? The point is that those other years you are referring to aren't drought years. This is the most severe drought that we have had in 40 or 50 years. I studied the numbers very carefully. I know the point you are making, but it misses the underlying point that people in this part of the country find most telling. And that is that, at a time of most severe drought, the release levels in the most recent months for which we have records and, as it happens, the months which are the key recreation months, we have got the highest levels of releases in seven years. This seems to be saying to us, "Look there are other things that are far more important to us in terms of policy decision than the needs of your area."

General RYAN. It is not the need of the area, Senator, it is the issue of the relative posture of recreation in regard to lake levels.

What we are seeing here is the depiction of the policy that has been given to us and the authorization of 1944 Flood Control Act and the priorities that we have followed in accordance with the direction from Congress since that time. And the relative posture of the maximum benefit according to navigation and hydropower as opposed to the lake levels necessary to support recreation.

Now recreation is not entirely dependant upon lake levels. Certainly I recognize that the reduction of the lake level has a serious impact on specific recreational entities. But we have also, and I think you are well aware of this, worked very hard and extended boat ramps to insure access to the public to that lake. And there is considerable storage remaining in the lake even at this time. So while the releases are larger those releases have been there because the drought is not just in the upper basin, but it is in the entire basin. And we manage this as a system from Fort Peck Lake down to the compost of Mississippi. And we have a number of objectives to meet. Among those are navigation hydropower requirements. We have also improved, relocated and extended the boat ramps to insure that recreation benefit is maximized to the extent possible.

Senator CONRAD. Let me be quick to say that we very much appreciate what was done with respect to the boat ramps. We do appreciate that.

But let me ask you this question. The Master Manual says that these priorities that you have just discussed were developed and generally agreed upon during the planning and design of the reservoirs. Can you tell us what agreements are these and what documents contain those agreements?

General RYAN. Senator, I don't have that with me today, but I would be glad to research that and furnish it for you for your use for the Record.

Senator CONRAD. Another question I would have is how do you take into account interests that are affected by lower or changing reservoir levels, such as recreation, water system intakes, fish and wildlife? Do you have specific goals or objectives for protection of those interests? If so what are they?

General RYAN. We have the authorizing documents to include the various amendments which were made to the authorizing documents which they were passed to the Congress. We addressed those requirements as we manage our lake levels. And our concern about river levels as well as lake levels. And look at the entire system of beneficial uses this water provides.

Senator CONRAD. Let me be more specific. What do you have that would be expressed in a specific planning document that would tell us what are the goals that you have for lake levels and what are the specific considerations that have been given to these various elements of various priorities that lead you to the operational conclusion that you have reached?

General RYAN. Our water regulation manual, the Master Manual for the Missouri River. Which you have in front of you.

Senator CONRAD. Correct me if I am wrong. This manual does not specify that when the lake is down 20 feet as it is now that we are going to have the highest releases in seven years? What I am asking really is where is it that the Corps identifies which lake

level will be aimed for in a given year? And what factors are weighed in order to come to that conclusion? That is not set out here.

General RYAN. That is the Master Manual. And this is the overarching manual which gives us the basic operations. And that manual addresses the issues not in terms of lake level, but in terms of systems storage which therefore translates into lake level as we balance these levels of the six lakes involved in the system.

It also identifies the various segment of the storage, identifies minimal lake level, the segment of storage identified for multiple purpose use and flood control use. The aspect you are speaking of is the annual operating plan which identifies for each year. And we address that each fall we go through a public interaction process speaking to the states and the public and public need, and the federal agencies. And then finalize that plan based upon the impact from these interactions. We will have that meeting on 1 November in Omaha to go through that process. That meeting was delayed somewhat because of the meeting tomorrow with the governors. And we wanted to make sure we had ample time to include their input and consideration.

Senator CONRAD. What happens when a state objects, as I understand it this year our state objected, to the operating plan? What happens when a state objects?

General RYAN. We review that and take it into consideration. And make the maximum determination we can within our overall mandate to manage the system. For example one of the conflicts we heard a few minutes ago from your panel number two was Mr. Herman's presentation about the need for lake levels. And Mr. Hill's argument for release for power. Well you can't hold the water in the lakes to hold the lake level up and still release to reduce power. That is one very quick sample of the type of conflict that we deal with and try to balance those out.

Senator CONRAD. The Master Manual states in the event of a severe and extended drought it may be necessary to shorten the navigation season to less than the normal eight month length in order to conserve the remaining available water supplies. What is the water being conserved for?

General RYAN. For future beneficial uses. We have a drought you are never certain when it starts, because you only know after the fact it has started. And only after the fact when it is over. It is one of the most complex and difficult chronological phenomena. It is more difficult than a flood and certainly is more difficult than normal years. It is described by Dr. Valachos of Florida State University as a non-event. Only in the sense that you are not sure until it is all over when it started and when it ended.

Senator CONRAD. That is quite true. I don't think we would describe it as a non-event.

General RYAN. I wouldn't call it a non-event in any sense.

Senator CONRAD. It is an unmitigated disaster for us.

General RYAN. I would say to you that the reason that we would continue to be more conservative in our releases as the lake levels if they should diminish is because we are trying to conserve increasingly a diminutive resource.

Senator CONRAD. Are recreation, fish and wildlife included in the conservation objectives?

General RYAN. Those are one of the benefits, yes, sir.

Senator CONRAD. Let me ask you this question. We read the O'Mahoney-Millikin Amendment to say that upstream interests are to be protected. They are the ones that made the sacrifice to have this system. And yet when we translate all of that into this Master Manual what we see is that somehow navigation comes out ahead. I have read the priority list here in the Master Manual. It is very clear. It sets out the six priorities with flood control number one, followed by all irrigation and other upstream water uses for beneficial consumptive purpose. Is it because the word consumptive is in there that recreation and municipal water use seem to fall in terms of priority to navigation?

General RYAN. With regard to municipal water use that is identified as a consumptive use. Recreation is not a consumptive use. It does not consume water.

Senator CONRAD. I suppose attorneys would have a field day over that one. But it does seem to me other upstream water uses more beneficial for consumptive purposes. Certainly water supply to cities would fit that definition. The downstream water supply and water quality, navigation, power insofar as possible without serious interference with foregoing functions and reservoirs would be operated for maximum benefit and recreation, fish or wildlife. Again I would ask you who determines these priorities? Who determines this list?

General RYAN. That list was put in those particular words by the coordinating committee. That was composed of the federal agencies to include the Corps, ten governors of the ten basin states. As they deliberated originally and as they have held meetings subsequent to the Master Manual.

Senator CONRAD. And when was that first set put in writing? That would have been in the 1940's?

General RYAN. I am advised the committee was formed in 1953 and the manual was first put in the 1960's.

Senator CONRAD. One of the first things on which we and General Hatch have agreed is that the Master Manual is outdated. He has freely said to us this does not fit the facts of today. It needs to be updated.

In your judgement when that work is done will the priorities here change?

General RYAN. That certainly would be an issue for discussion and deliberation.

Senator CONRAD. Given the facts of what has happened, you know, if you look over this project and you look what we were told, you have heard some very clear statements from leaders of this state and South Dakota and others who have studied the record. Clearly things have changed. Because this state was told you give up 560,000 acres and you are going to get a million acres of irrigation. That is all done with. That is all gone. We are not going to get a million acres. We are not going to get 500,000 acres. We are not going to get 300,000 acres. So it would seem to me that over time the weighting of these elements would need to be altered to fit the reality that we confront today. Wouldn't that seem to make sense?

General RYAN. Yes, sir. And that is exactly what we are going to do. As I indicated in the review most recently in 1979 and I began a review of that manual already. And I will meet tomorrow with the governors of the ten basin states to continue that review. And to obtain their input on what issues ought to be addressed and how we ought to pursue specifically with that possibility.

Senator CONRAD. What would it take to have a policy that is different than this policy? I mean, you understand that if you were in our shoes in our state and you saw numbers like those I presented which show the high release levels you would be angry. If you were a marina operator, if you were the mayor of Pick City, this would make you damn mad. What would it take to change this policy in your judgement? What does somebody have to do? Does there have to be a law changed? Does the Master Manual have to be changed. What do we do to get this changed?

General RYAN. First of all I wouldn't agree with making me angry. Because it is a display of the overall federal priority associated with this project.

Senator CONRAD. I guarantee you though if you were the mayor of Pick City this would make you angry. I mean, it may not make Bob Ryan mad, but I tell you if you were the mayor of Pick City you would be mad. And I don't want to speak for the mayor of Pick City.

Mayor PARISH. You have said it completely. Thank you.

General RYAN. I don't want to make an issue, but I think Mayor Parish made a very helpful case for the development of Pick City as a result from the benefit of these reservoirs. She indicated the fact Pick City had grown. And the fact was there as a result of those aspects.

Mr. Herman talked about 40 marine dealers and 41,000 boats and \$13 million annual expenditures for new boats and \$10 million expenditures for motors. Would those occur if these reservoirs were not here? I don't think so.

Now to go back to the issue.

Senator CONRAD. Let me just stop you there. Really if you would put yourself in our shoes, I think you would see this in a different perspective. Yes, there have been benefits. Yes, Pick City has experienced benefits. But you have got to listen to the next few sentences, too. The mayor indicated quite clearly that business has been reduced 50 percent in one year. Mr. Herman indicated two companies have changed hands. Others are on the brink of changing hands. There is no question we have gotten some benefits. But, if we compare it to what we were promised we are way short. We are getting terribly hurt. And that is why I say the mayor of Pick City is angry. I know Steve is; we're lifelong friends. I can hear the anger in his voice. I understand it because if you look at it from our perspective it is just not tolerable. We ought to be having the lowest releases in the last seven years. And what do we do to get that? What would it take?

General RYAN. We have had the lowest releases during the months of January, February, March, September we had the lowest releases in the 23 years you have had on record of this project.

Senator CONRAD. You talk about four months. I will talk about four months, May, June, July and August. What do we do that gets a change in the policy that leads to that?

General RYAN. That process would be a change in the priorities which these projects produce benefits.

Senator CONRAD. And how would we get that done?

General RYAN. There is several ways. One is first of all through the review of the Master Manual. It may be that process may be difficult to achieve in finding inter-basin coordination and may eventually require adjustments of the basic authorizations, the legislation that authorized the project. Or clarification of congressional intent or whatever. Those are the process, those are the steps to go through to define those kinds of issues.

Senator CONRAD. Let me ask you this question if I may. The Master Manual states that, "the minimum downstream flows which permit satisfactory navigation are 25,000 CFS at Sioux City and Omaha." Over the past three navigation seasons how often do flows at Sioux City drop below 25,000 CFS for any significant period?

General RYAN. I think I have those notes in my briefcase.

Senator, the flows of Sioux City have not fallen below 25,000 CFS during the past three navigation seasons. Now the reason for that is that if those flow targets identified as minimum flows and that minimum flow along with the period of flow define a quantity of water, a volume of water released. And we have adjusted that to reduce the period and increase the instant quantity released, the instant releases.

Senator CONRAD. Let me ask you a follow-up. I earlier asked if there were any specific objectives with respect to recreation, waterfowl, city, municipal use, beneficial use. Are there any specific objectives set out in the annual operating plan that relate to those items?

General RYAN. To the items that you just mentioned?

Senator CONRAD. Recreation, water system, intakes, specific objectives?

General RYAN. I don't recall those specifics. In terms of lake levels?

Senator CONRAD. Right.

General RYAN. We are concerned obviously to insure that the water intakes, both municipal and industrial, are provided for.

Senator CONRAD. Is there a specific objective set out the annual operating plan that tells you whether or not in fact those are being addressed?

General RYAN. As I indicated earlier there is not necessarily an elevation, lake elevation indication. There is a water storage quantity that drives our decision on releases.

Now I might also say that it is important to understand that there are four targets for navigation releases. And those targets occur at Sioux City, Omaha, Nebraska City, and Kansas City. And necessary to manage to whichever of those is not being met, not the least of those.

Senator CONRAD. Let me put it to you this way. If you review these priorities, flood control number one, all irrigation and other upstream water uses for beneficial consumptive purposes, down-

stream M&I water supply and water quality. Fourth is navigation. And yet what I hear you saying is that navigation has something specifically set out for it. But you don't have something specific for beneficial consumptive purposes which is supposedly the number two priority behind flood control?

General RYAN. But they are all being met by the current lake levels. We plan our releases.

Senator CONRAD. The reaction you are getting from this audience is because there are a lot of communities that don't believe that. And they don't feel that way. When I read this Master Manual it contains lots of pages of information on navigation. It seems to have a bias towards that. I think if anybody would look through here as I did, that person would come away with a sense that navigation has been given an awful lot of attention, while other areas have not been given much attention at all. From your perspective how would you react to that?

General RYAN. I think that is maybe by a number of pages that may be an assessment, but I don't think in terms of intent or certainly our management reflects that kind of intent at all. Our management reflects the priorities which we were given in terms of the federal mandates in these projects.

Senator CONRAD. Well I must say I think others would conclude, and I think fairly, that there is a bias towards navigation. And maybe that is understandable. The Corps itself has traffic, is that correct?

General RYAN. Yes. It is not included in the quantities of material moved. Our own internal traffic is not included in the commercial waterway usage figures. Governor Guy had that incorrect in his statement to that affect.

Senator CONRAD. Do you have in your report of traffic and tonnage hauled on the Missouri River a figure for how much of that is Corps of Engineers activity?

General RYAN. I don't have that number.

Senator CONRAD. Is there any way we could get that number?

General RYAN. I am sure we can try to draw up an estimate of that. I don't know what that might be.

Senator CONRAD. I think that would be useful to us. Governor Guy had a question of what the cost per ton charged to the Missouri River navigation would be. Do you have any idea what that would be a cost per ton?

General RYAN. I don't have those figures.

Senator CONRAD. The Master Manual states, "in the event of a severe extended drought," and I asked you this before, "it may be necessary to shorten the navigation season." You have reported before that the navigation season was shortened by essentially five weeks. I can't remember, a week on the front and four weeks on the tail-end. That would be an eight month season?

General RYAN. That is correct.

Senator CONRAD. How is the determination made as to what the trade-offs are between upstream beneficial uses and navigation? In other words, how do you make a decision to shorten the navigation season by five weeks or ten weeks? How is that made? What is the process to make that decision?

General RYAN. The Master Manual defines the quantity of water to be released from the project in terms of full services or minimum service levels from the duration of those projects. Or should water quantities and storage be just below that and even more reduce navigation support. Now within that process we have used our hydrologic engineering to identify the quantity of water released. We have then in consultation with the navigation interests determined the impacts from various adjustments and the navigation season. And have made adjustments in that to insure that we can accommodate their reduced requirements within that navigation period. So we have reduced our season looking at the public interests benefits of those kind of adjustments.

Senator CONRAD. Has anybody from the downstream navigation industry contacted the Corps and protested the reduced season?

General RYAN. Yes, sir.

Senator CONRAD. And what form have those contacts taken and what has been the general message transmitted?

General RYAN. These are in form of letters and telephone calls from reservoir control center. And those messages have been that the reduction would cause termination of the navigation season early would cause boats and barges to be stuck in the upper river and not be able to deliver their cargoes downstream. And that there would be a significant increased economic impact.

Senator CONRAD. Let me ask you this question. What was the navigation plan for 1988 and 1989? Did those plans follow the Master Manual?

General RYAN. They followed the Master Manual in general intent. We adjusted the navigation period to reduce the period of navigation. But we slightly increased the service levels during those reduced periods.

Senator CONRAD. Is there any truth to the suggestion voiced in some quarters that strict adherence to the Master Manual all would have resulted in a different navigation season, would have kept more water in the reservoirs during the summer?

General RYAN. It would have extended the period for navigation. It would have ended with essentially the same levels at the end of the period that occurred. The reservoir level curve that shifted a little bit to the right on the curve.

Senator CONRAD. Which means what?

General RYAN. That there would have been slightly increased levels of water during the eight month period. But that the difference at the end of that period would be no different.

Senator CONRAD. What I hear you saying is that the Master Manual was not followed for this navigation system?

General RYAN. The Master Manual was followed. And the Master Manual does allow minor deviations from its guidance to accommodate the various requirements.

Senator CONRAD. But correct me if I am wrong, maybe I didn't understand. I heard you saying that if the Master Manual had been followed that the reservoir level would have been moved to the right. In other words higher levels would have been in those lakes. Did I misunderstand?

General RYAN. I believe you did, Senator. The starting point would have been the same for the navigation season. The April

point and the December point would have been the same. The curve would have been slightly different form in that the curve would have had a longer period of activity. And so you would have had a slight adjustment in the form of that.

Senator CONRAD. We would have had higher levels in the lake or lower levels?

General RYAN. The difference at the end of the navigation season would have been about 1.2 feet at the end of the entire period.

Senator CONRAD. Let me ask it the way I can understand it. Would we have had higher levels in the lake during the recreation season or lower levels in the lake during the recreation season?

General RYAN. You would have had slightly higher levels during the recreation season.

Senator CONRAD. Well now I am really confused. Why wasn't the Master Manual followed then?

General RYAN. Because we identified that there was a way to address all benefits and work out those procedures in a way that would follow the construction of the Master Manual slightly adjust the curves to improve the opportunities for release both for hydropower and navigation.

Senator CONRAD. So, am I hearing that protests that you got from the navigation interests, the phonecalls and the letters, had an affect on the decision?

General RYAN. We consider those when we work the process, yes, sir.

Senator CONRAD. And did you get more flack from the navigation interests than you got from upstream interests? Would it be fair to say there were more phonecalls, more letters?

General RYAN. I don't measure it in quantity.

Senator CONRAD. Let's try. I do. Tell me, did you get more from navigation interests?

General RYAN. Yeah, I believe I did.

Senator CONRAD. Folks, I think you just heard it. Better sharpen up our pencils and write more letters.

If we had the million acres authorized under irrigation we would be diverting more than two million acre feet of water from Sakakawea. And under those conditions there would be no navigation, would there?

General RYAN. It would be reduced.

Senator CONRAD. Would it be fair to say it would be dramatically reduced?

General RYAN. It depends upon how you would manage those releases.

Senator CONRAD. Doesn't that raise an interesting question here though of what is happening to us? We were promised and it is in all of the documents a million acres is going to be irrigated in North Dakota. North Dakota, you folks give up 560,000 acres of your most productive land, you get a million acres of farmland. And by conservative calculations that would be two million acre feet of water use per year. That wouldn't be a whole lot of navigation going on. It goes to the question of what was the original intent. What was Congress saying ought to be the priorities here? I tell you, I think Congress recognized the livelihood and correctness that navigation would get cut back severely when upper basin

needs came in competition. And yet the result that we are living with now is that navigation has been ratcheted up the chain of priorities. Somehow we have to find a way to deal with that.

General RYAN. We have addressed our priorities in the guidance we have been given.

Senator CONRAD. I think there may be a question about that. If you could tell me what is the maximum flood protection pool level in Sakakawea? 1850 is the maximum operating level.

General RYAN. 1854.

Senator CONRAD. 1854. If the maximum flood protection pool level was 1854 where are we now in your calculations?

General RYAN. 1823.

Senator CONRAD. And do you have a standard? We heard some assert today that you could go down 50 feet before you would assure us of holding the level. Is that accurate?

General RYAN. There is a minimum pool level for Sakakawea identified in the Master Manual.

Senator CONRAD. Could you tell us what that level is?

General RYAN. 1775.

Senator CONRAD. 1775. What would be done to preserve that level?

General RYAN. To sustain that level essentially releases would be diminished necessary to sustain that level.

Senator CONRAD. And what established 1775 as the level?

General RYAN. I would go back to the original planning studies for the projects and in those design memoranda they were identified as particular pool level. And it is also carried forth in the Master Manual.

Senator CONRAD. Well that raises an important point. If that were changed, we would get a much different set of decisions as to what is happening with releases?

General RYAN. Yes.

Senator CONRAD. Will you try to ascertain for us, for the Record, what is the basis for 1775, what calculations were made? What were the considerations?

Does the Corps have a specific plan for reservoir operations during drought times?

General RYAN. Yes, sir.

Senator CONRAD. And how do you change your plan during a drought?

General RYAN. As I have indicated the basis for that in terms of what regulation is our Master Manual for reservoir control. And we continually become more conservative in our releases as the lake levels diminish.

Senator CONRAD. Like in May and June and July?

General RYAN. I have to tell you that that relates to the entire system and so it is not just Garrison Dam or Lake Sakakawea, but it is the entire navigation system. As I pointed out earlier release from this system, the six upstream lakes by bay nine is the lowest it has been since those lakes have been established.

Senator CONRAD. In light of your experience over the past seven years does the Corps have plans for changes in reservoirs operation during drought times? Are you conducting any studies to determine options you have to modify operations?

General RYAN. We have new study that is being identified for a drought operations.

Senator CONRAD. And when might that be completed?

General RYAN. That was 1990 pending authorization. And the period on that is several years. I am not certain that I have the specifics on that. I think that is a several year study, Senator.

Senator CONRAD. Is the Master Manual the same thing as the drought plan?

General RYAN. The Master Manual included management provisions for both flood and drought.

Senator CONRAD. But what I am asking is there something—

General RYAN. In addition to that?

Senator CONRAD. In addition to that.

General RYAN. No, sir. Those plans are incorporated into that Master Manual.

Senator CONRAD. Would you agree with me you are not responsible for this, this was developed long before you?

General RYAN. I am responsible for it now.

Senator CONRAD. You are responsible for it now. But you weren't responsible for the writing of this manual?

General RYAN. I was not present in 1979 when it was last written, no.

Senator CONRAD. Would you say that it is deficient in terms of dealing with the drought situation or at least a drought as severe as the one we have encountered?

General RYAN. That manual was written and based upon computer modeling studies which incorporated the drought of the 1930's, a 12 year drought.

Senator CONRAD. That was the drought that is the basis for what is here?

General RYAN. It was a part of those considerations. It was modeling the 1930's drought before their dams were even built. And that computer model provides for sustaining the 12 year drought within the multi-purpose pool allocation of water which are in the total system storage.

Senator CONRAD. If that is the drought base line, what flood serves as the design flood for the Missouri River reservoir?

General RYAN. There is a maximum probable flood which is a hypothetical combination of the most severe hydrologic opportunity. And it is a theoretical flood which exceeds all records.

Senator CONRAD. Exceeds all records. And that as I understand has never been changed since the 1940's and 1950's.

General RYAN. I am not certain about that whether that has been updated or not.

Senator CONRAD. Let me go to a final category, assistance recreation and other users. You testified in Parshall that you have got four categories of ramps.

Category I: Corps built and Corps operated. Category II: Corps built and operated by others. Category III: cost shared. Category IV: built entirely by others.

General RYAN. Yes, sir.

Senator CONRAD. And you indicated in your testimony the Corps had no authority to repair and extend category III and IV ramps, is that correct?

General RYAN. Our current utilization of our authorities for extension of category I and II ramps are based upon utilization of maintenance funds. The current direction from the Congress is that any new construction would require cost sharing. So we have identified our authorities under maintenance to address our category I and II ramps.

Category III ramps if they were to be extended would since there is no opportunity for maintenance on the Corps' part would have to be identified as construction. And if that were to occur it would then appear necessary to consider the use of construction funds and also cost sharing on the categories I and II.

There is no authority for any Corps investment under the present guides from Congress for category IV.

Senator CONRAD. Well what I hear you saying is that the Corps is prohibited from extending category III and IV boat ramps?

General RYAN. Category IV they are. Any extension of category III would have to be under a cost sharing arrangement with under the direction of Congress.

Senator CONRAD. Let me make sure as we go along here that I understand you correctly. You are saying the Corps is prohibited from extending category IV?

General RYAN. That is correct, when it is built and maintained by others.

Senator CONRAD. You testified in Parshall you had no authority to repair and extend category III and IV ramps.

General RYAN. Utilizing maintenance funds.

Senator CONRAD. What is the prohibition that prevents you from extending category III?

General RYAN. The prohibition is that we do not presently have funds for the construction purposes nor have we achieved a cost sharing arrangement with any of the local sponsors for those activities. And both of those criteria need to be satisfied before we proceed.

Senator CONRAD. Why can maintenance be used as the rationale for I and II and not be used for III?

General RYAN. There is no maintenance authority for the Corps on category III.

Senator CONRAD. Is the Corps prohibited from dredging access channels to marinas and boat launching areas?

General RYAN. No. We need to meet the necessary criteria of funding and necessary environmental studies. And it needs to be an appropriate activity to extend federal funds.

Senator CONRAD. Is the Corps prohibited from extending public or private water intakes?

General RYAN. We do have some drought support authority, emergency water supply authority. And there would generally in the transport of that water we look to the local entity we have the state and the city to handle the adjustments in their intake structure.

Senator CONRAD. Can we get the details of that authority? If, because of falling lake level, a town has a specific problem with its water intake, for example the City of Williston has a problem of silting, and its water intake is threatened, would the Corps have the authority to help that city retain its water supply?

General RYAN. We would need to look at the background and make decisions, any guidance they have received, when they first installed that water intake, and then look at the alternative methods. They might have to acquire water for the city be it from well fields or some other source, regional water supply systems or other materials. Look at alternatives. And then we would need to look also at what support the city or the state can provide in assisting the water supply.

Senator CONRAD. My question is whether there is anything that would prohibit the Corps from helping in a situation like that?

General RYAN. Given if necessary conditions are met I believe there is authority to do that given a whole series of other prior conditions are satisfied.

[The prepared statement of General Ryan follows:]

U. S. ARMY CORPS OF ENGINEERS
MISSOURI RIVER DIVISION
COMPLETE STATEMENT OF
BRIGADIER GENERAL ROBERT H. RYAN
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
BISMARCK, NORTH DAKOTA
OCTOBER 9, 1989

Mr. Chairman and members of the Subcommittee, I am Brigadier General Robert H. Ryan, Division Engineer, of the Missouri River Division, U. S. Army Corps of Engineers. Accompanying me are Colonel Donald E. Hazen, District Engineer, Omaha District and Mr. Duane Sveum, Chief, Reservoir Control Center, of the Missouri River Division. I am pleased to appear today on behalf of the Assistant Secretary of the Army for Civil Works to discuss Missouri River main stem regulation, the lake levels that have resulted during this drought period and, in particular, the level of Lake Sakakawea.

My statement at your hearing held in Parshall, North Dakota, on August 25, 1989, addressed the authorization of the Garrison Project and its historic contribution to the many purposes it supports. I will not repeat the statements made at that hearing except to restate that the reservoirs in the system were authorized and are regulated to support flood control, navigation, hydropower, irrigation, municipal and industrial water supply, water quality, recreation, and fish and wildlife. These purposes are listed on Chart 1, which also shows a profile of the main stem Missouri River system and the storage capacity of each of the six reservoirs.

I would like to describe briefly the current hydrologic conditions, the Missouri River Main Stem Reservoir Master Manual, our water control management procedures, and how Garrison Dam is regulated in concert with the other five reservoirs on the Missouri River main stem. I will also discuss what we are doing to address the impacts of the low lake levels.

Drought Conditions

The drought we are now experiencing is the most severe drought we have had in the past three decades. It is having a significantly greater impact on the Missouri River main stem reservoir system than the earlier two-year drought we experienced from 1980 through 1981. Runoff to the Missouri River upstream from Sioux City is below normal for the third year in a row. This is graphically demonstrated on Chart 2. The 1988 runoff was only half of the normal runoff. It was equal to the low runoff of 1961, which at that time was the lowest runoff since 1940.

Master Manual and Project Purposes

The Missouri River Main Stem Reservoir Master Manual, which I shall refer to as "the Manual", is the document that describes how the reservoir system will be operated at all times, including times of drought and flood. During its development, the Manual was reviewed by a committee composed of representatives from the affected Federal agencies and representatives appointed by the governors of the ten basin states. The Manual was last published in 1979, and it is presently being reviewed due to river basin changes over the last 10 years by the many interests which the reservoir system serves. The regulation criteria presented in the

Manual list the regulation priorities. These priorities were reviewed during the question and answer period at the hearing in Parshall, North Dakota, on August 25, 1989. I would like to summarize them. Section IX of the Manual, which is the chapter on multiple purpose regulation, lists the priorities as follows:

1. Flood Control,
2. Irrigation and other upstream water uses for beneficial consumptive purposes,
3. Downstream municipal and industrial water supply and water quality requirements,
4. Gavins Point releases scheduled to provide equitable service to navigation and power,
5. Releases from the projects upstream from Gavins Point will be adjusted for the efficient generation of power, and
6. Without serious interference with the foregoing functions, the reservoirs will be operated for maximum benefit to recreation, fish and wildlife.

Water Control Management Procedures

It can be noted from the list of priorities that navigation and power are given preference over recreation and fish and wildlife. However, as a result of the drought we have instituted conservation measures, as prescribed in the Manual, which reduce project releases. These conservation measures provide continued support, but at reduced levels, to high priority project purposes during a long-term drought. These conservation measures also result in higher lake levels.

Releases for hydropower and navigation have been reduced as the

reservoir storage diminishes. We did not provide full service flows to navigation and power in 1988 and 1989 because of the conservation measures. For example, the opening of the navigation season was delayed by one week. Navigation releases will be discontinued 30 days earlier than normal and power releases this winter will be lower than normal. The quantity of water released for navigation and power is based on the volume of stored water remaining in the system; the lesser the volume of storage, the lesser the amount released in support of navigation and hydropower. As a result of the conservation measures, the volume of water released in 1989 will total approximately 83% of the average annual release. This is demonstrated on Chart 3.

The volume of storage in the three most downstream reservoirs is small (see Chart 1), and the tributary inflows are minor, therefore releases from the downstream projects, including Oahe, parallel the releases set at Gavins Point. Because of the seasonal variations, Garrison releases are generally much different than releases from the lower four reservoirs on a daily, weekly, or monthly basis. The large storage volume in Oahe Reservoir, from which withdrawals are made to meet the downstream needs, permits the Garrison release pattern to differ significantly from those at the downstream projects. On a seasonal basis, Garrison releases vary dramatically from those at Oahe in order to enhance winter hydropower production and to maintain adequate flows to support irrigation and other withdrawals, as well as to provide adequately for the fish and recreation downstream from Garrison Dam. On an annual basis, the releases from the two upper reservoirs, Fort Peck and Garrison, are adjusted so that the upper three reservoirs (including Oahe) share the drought impacts on a nearly equal basis.

Future Lake Levels

The elevation of Lake Sakakawea has been of great concern. At the time of the meeting in Parshall, the elevation had fallen to slightly below elevation 1824. It is currently hovering right at elevation 1823 and is expected to climb slightly until releases are increased in late October. The purpose of the increased release rate during the winter months is to meet the greater winter hydropower production. Lake Oahe is at a relatively lower level during the fall period, partially as a result of the lower fall releases from Garrison Dam. The increased winter releases bring the three upper reservoirs back into balance so that they share the drought impacts more equally. We have prepared forecasts of reservoir elevations. We have projected that there is an 80 percent chance the pool will be between elevation 1816 and 1821 at the beginning of the next runoff season next March. Looking ahead to next year, we also forecast a 90 percent chance that the pool could be as high or higher than the current 1823 foot pool elevation during the 1990 recreation season. We forecast only about a 10 percent chance that the pool will rise to normal levels. Chart 4 demonstrates the range in forecasted lake elevations in addition to presenting the historic 1988 and 1989 levels and the 21 year historic monthly maximum, average and minimum levels.

Other Activities

In addition to the conservation measures previously discussed, the following measures have been undertaken to mitigate the impacts of the low lake levels. We are extending or relocating boat ramps which the Corps of Engineers built and maintains, and also those which the Corps of

Engineers built but are now maintained by others. We extended or relocated boat ramps in twelve areas in North Dakota during Fiscal Years 1988 and 1989. We will be extending or relocating boat ramps in twelve additional areas in North Dakota during Fiscal Year (FY) 1990. We spent a total of \$1.8 million in FY 1988 and FY 1989 to extend boat ramps in 35 areas in North Dakota, South Dakota, and Montana. We will be spending an additional \$1.6 million during FY 1990 to extend boat ramps in 38 areas in those states.

Moreover, the recently enacted FY 1990 Energy and Water Appropriations Bill supported the President's FY 1990 budget request for the Corps of Engineers to initiate The National Water Management During Drought Study. This study is in response to the drought of 1988 and its purpose is to develop national and regional decision making processes and policies for managing water during drought.

Summary

Reservoir systems are planned, designed, built, and operated to store water when there is an excess and to use that water when there are shortages. This means that reservoir levels will be high when runoff is plentiful and will decline when the water is used during a drought. The most difficult question to answer during a drought are, "how quickly do you use what you have stored?" and, "how can you assure that all purposes are sharing the impact of the drought equally and in accordance with the law?"

Peoples' needs and desires change with time. It has been 10 years since the Manual has had a comprehensive review. I agree that it is time for a review, and we initiated that review. The review of the water

control plan will be coordinated with the Federal, State and local governments, as well as with the many public interests that are affected by the management of the reservoirs. I emphasize that all interests will have input into the process. Social, economic, environmental, legal and engineering considerations will be evaluated. Because the system is so complex and because such a large degree of interdependence and potential conflicts exist between the many purposes served, the effort will not be completed quickly or easily. We are approaching this as a major effort that will challenge us all.

The division staff and I look forward to working with you and your constituents in the process of identifying a plan that provides the greatest possible benefits to the state, the region and the Nation.

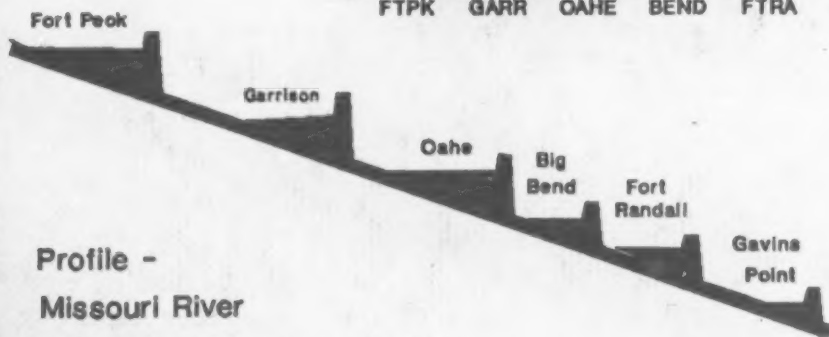
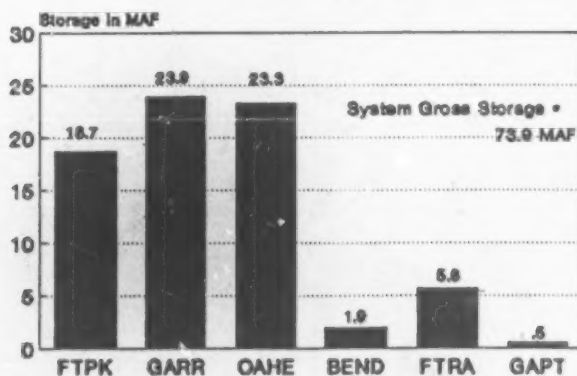
This concludes my statement, Mr. Chairman. I would be pleased to address any questions that you or other members of the Subcommittee may have.

Missouri River Main Stem Reservoirs

Authorized Purposes

- Flood Control
- Navigation
- Power
- Irrigation
- Fish and Wildlife
- Recreation
- Water Supply and Water Quality

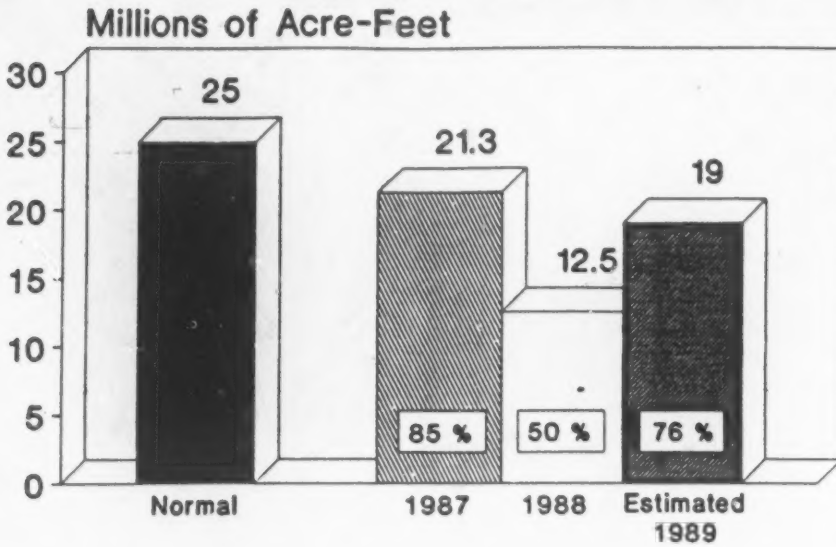
Missouri River Mainstem Gross Storage



Profile -
Missouri River
Main Stem Reservoir System

CHART 1

Missouri River Runoff Above Sioux City CY 1987-1989 Vs Normal



Annual Runoff at Sioux City, Iowa Adjusted to 1949 Level of Depletions

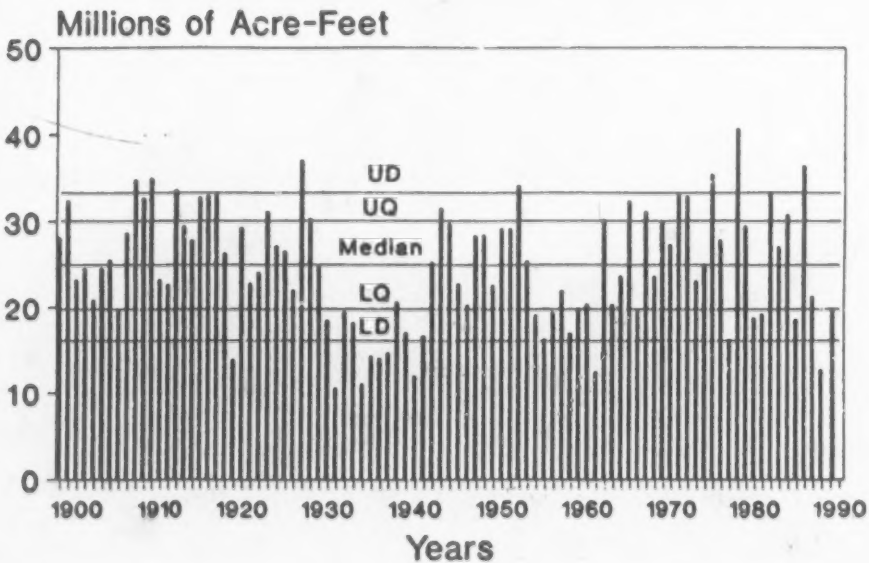
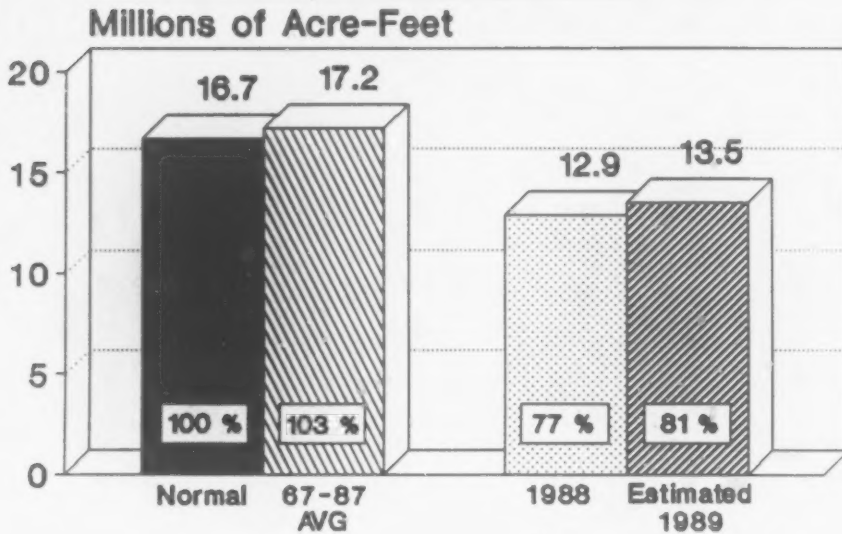


CHART 2

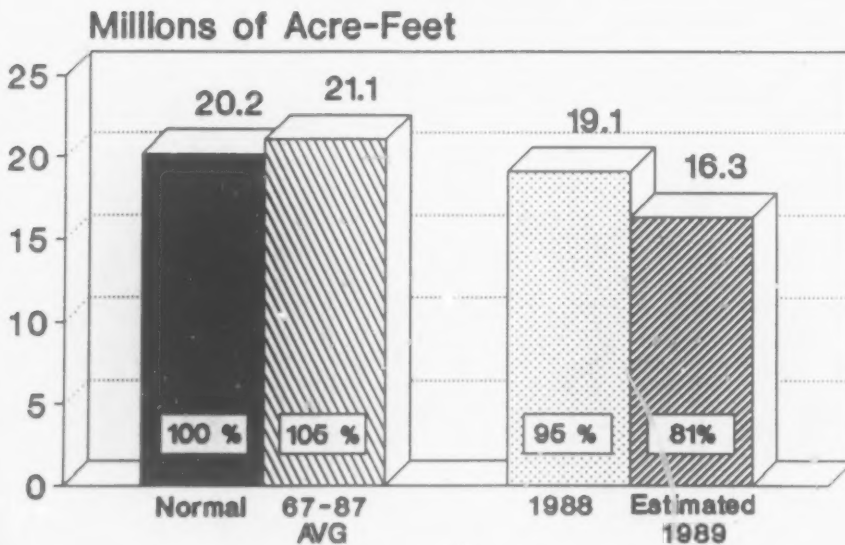
GARRISON RELEASES

Normal, Average and Recent

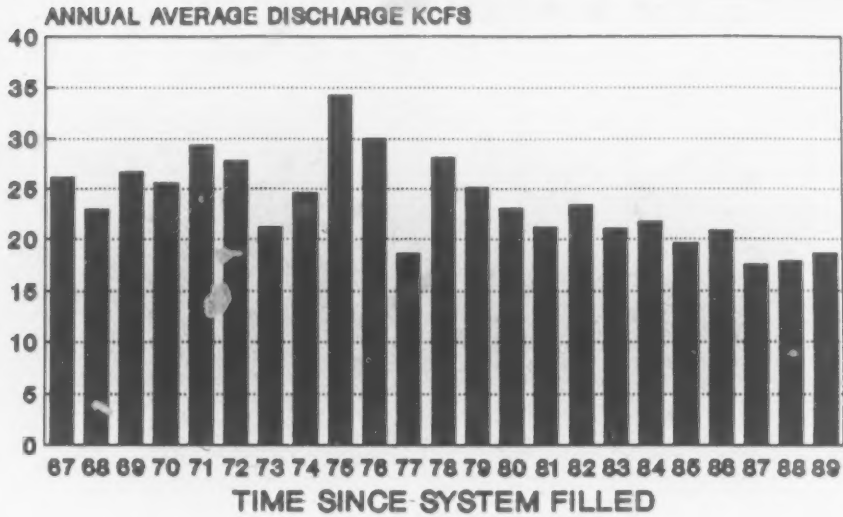


GAVINS POINT RELEASES

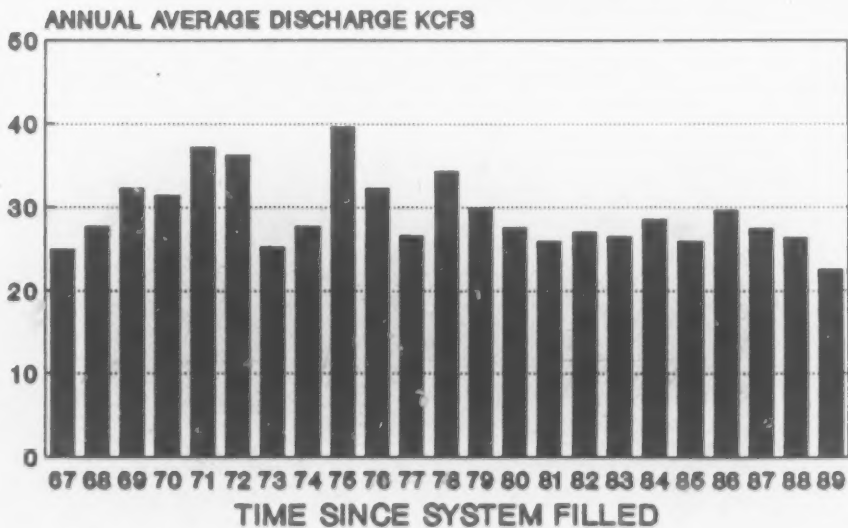
Normal, Average and Recent



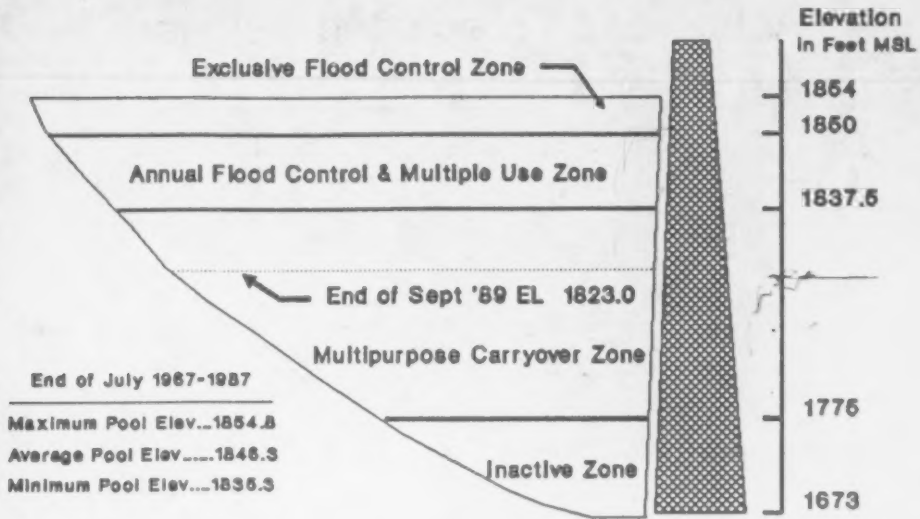
ANNUAL RELEASE FROM GARRISON RESERVOIR



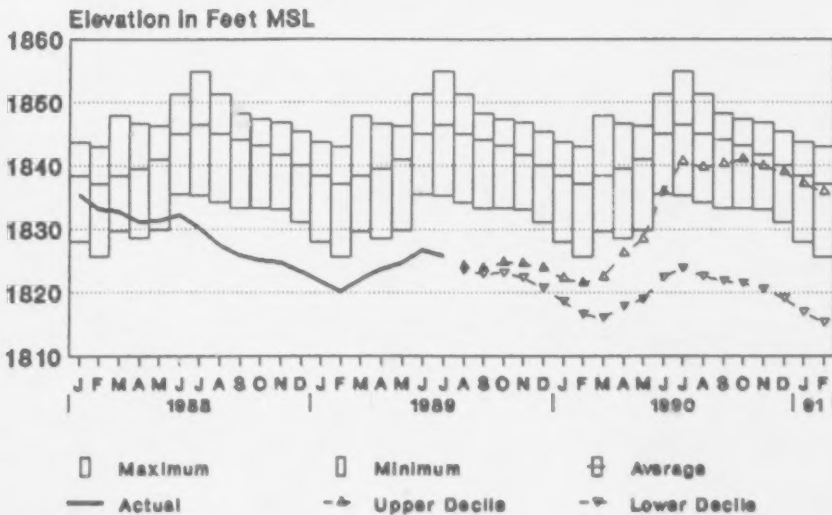
ANNUAL RELEASE FROM GAVINS POINT RESERVOIR



Garrison Dam - Lake Sakakawea



Garrison Actual & Forecasted Pool Elevations

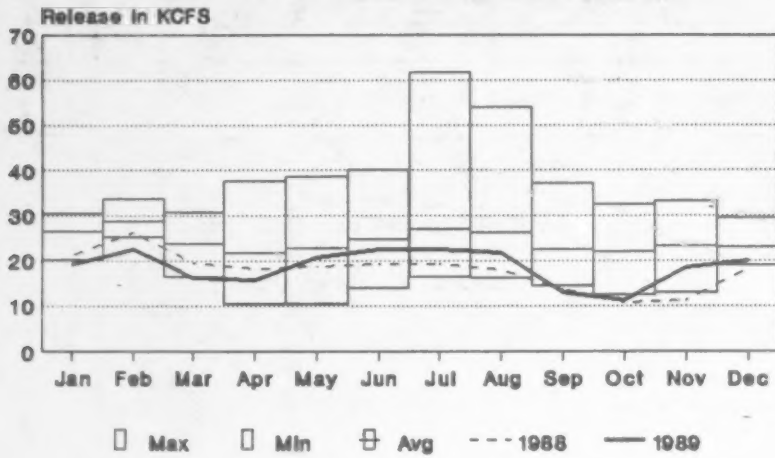


1990 ADP (Preliminary)

Max, Min & Avg 1967-1967

CHART 4

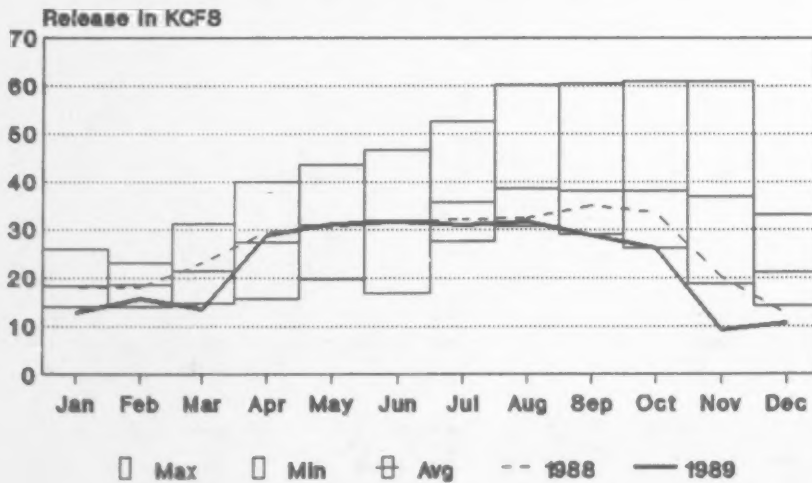
Garrison Actual and Forecasted Release



October 1, 1989 Forecast

Max, Min & Avg 1987-1987

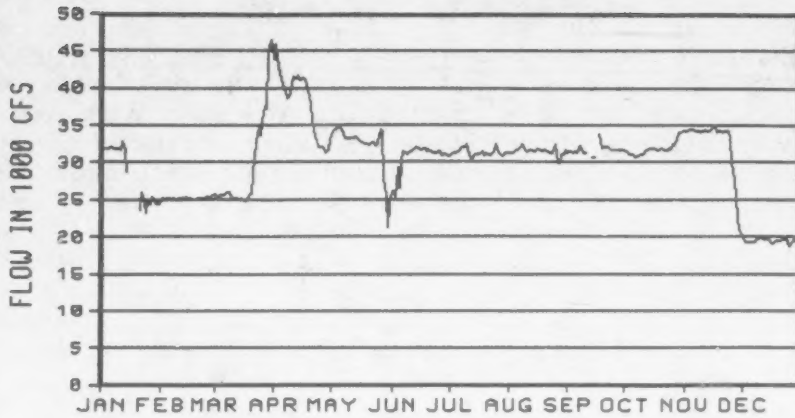
Gavins Point Actual and Forecasted Release



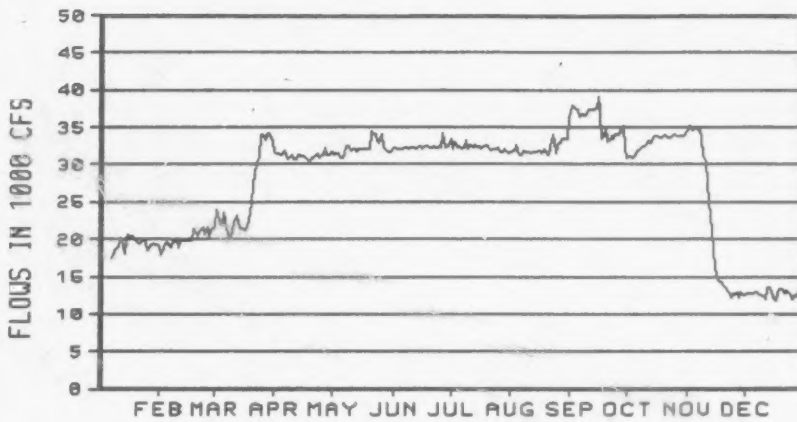
October 1, 1989 Forecast

Max, Min & Avg 1987-1987

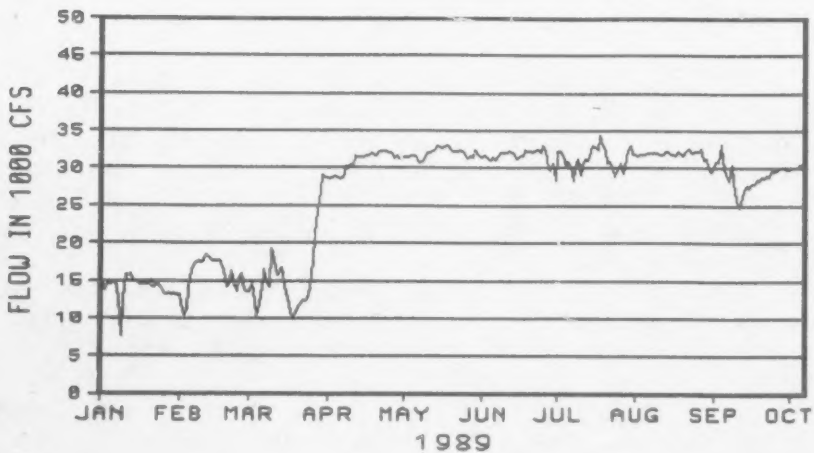
SIOUX CITY FLOWS - 1987



SIOUX CITY FLOWS - 1988



SIOUX CITY FLOW - 1989



Senator CONRAD. Is somebody here a spokesman for Williston that might define the problem for us there?

STATEMENT OF GENE EMERY

Mr. EMERY. I am Gene Emery. I work for the City of Williston. And I guess our concerns is that Williston is our water intake and the aggradation of the Missouri River and Williston. We were concerned way back when they were talking about Garrison Dam. And our mayor, Mayor Ditzworth at that time he gave testimony to the committee on the lake level that was the major concern was the aggradation on the upper end of Lake Sakakawea. We have flow at the Lewis and Clark Bridge where we have our water intake. A mile down the stream it becomes a lake. And of course this is where the deposit of silt and aggradation is taking place. In 1961 the Corps furnished money to conduct water intakes at Williston and at the Lewis and Clark Bridge. By the way, Williston has seven miles of dike to the south of Williston for flood control for the city itself. At that time the water plant at Williston was displaced and the Corps appropriated some money to construct intakes at the Lewis and Clark Bridge. We went in line in 1961 with that intake. And we started noticing aggradation on the upper stream at that time.

We worked with the Corps and with our Senator Burdick at that time on obtaining money from the Corps and appropriating money to the Corps to build another intake in the mainstream which was completed in 1982. The two intakes that we presently had in 1961 are completely covered with sand at this time.

Our concern is that upstream from the bridge about two miles the river takes a horseshoe bend, comes around. We are concerned that the river stays in place. We have a great concern with that. We are also concerned and have some concern with the west point of the Buford Irrigation District which had high water problems from the aggradation. To lose that irrigation project would be a very severe economic loss to our city and our community.

So our main concerns are the aggradation on the upper end of the lake. It is interesting when Mayor Ditzworth in 1954 was presenting our testimony on aggradation that the Corps made a statement at that time, I think it was General Potter in saying that we will never see that in 50 years. And maybe we won't see any aggradation at all. The Corps of Engineers records indicated that 47,000 acre feet of silt flowed past Williston prior to the building of Garrison Dam. That is equivalent to 100 million tons of silt. That 100 million tons of silt is now being deposited on the upper end of the lake adjacent to the City of Williston. They are telling us that they can see the affects of the aggradation downstream from Williston at Lewis and Clark recreation area.

So our concern is really aggradation, maintaining the intake structure, and the river in its present location at Lewis and Clark Bridge. And the enormous mud flats that are adjacent to our city. Thank you.

Senator CONRAD. Let me ask as a follow-up if I could. General Ryan, have there been any aggradation studies done?

General RYAN. Yes, sir.

Senator CONRAD. Could you tell us what that shows?

General RYAN. I don't know the specific numbers. But, of course, we do know aggradation occurs and it is occurring.

Senator CONRAD. So what would the result of that be with respect to a city like Williston?

General RYAN. I am sure we have furnished the results of those studies. I would be happy to discuss it with them.

Senator CONRAD. Have you received those?

Mr. EMERY. We did at one time several years ago. We seen some of the results.

Senator CONRAD. I guess there are several points. One is the aggradation, the other is the water intake. And you have heard the description of the problem they are having.

General RYAN. My earlier response related to what I thought were the drought related issues, but this particular issue is not necessarily drought connected. So I have to use different authority. We would be glad to discuss the issue with Williston. And I have asked Mr. Sveum to make a note on this and get to Williston later to address that.

Senator CONRAD. One final question and then we will close this down. We are now 15 minutes beyond the time, and we have made a commitment to the General and other witnesses that we would end on time.

Will you build new boat ramps that are usable? You have indicated using the maintenance authority on categories I and II. If that does not provide sufficient access, is the Corps examining the construction of other ramps in order to assure lake access?

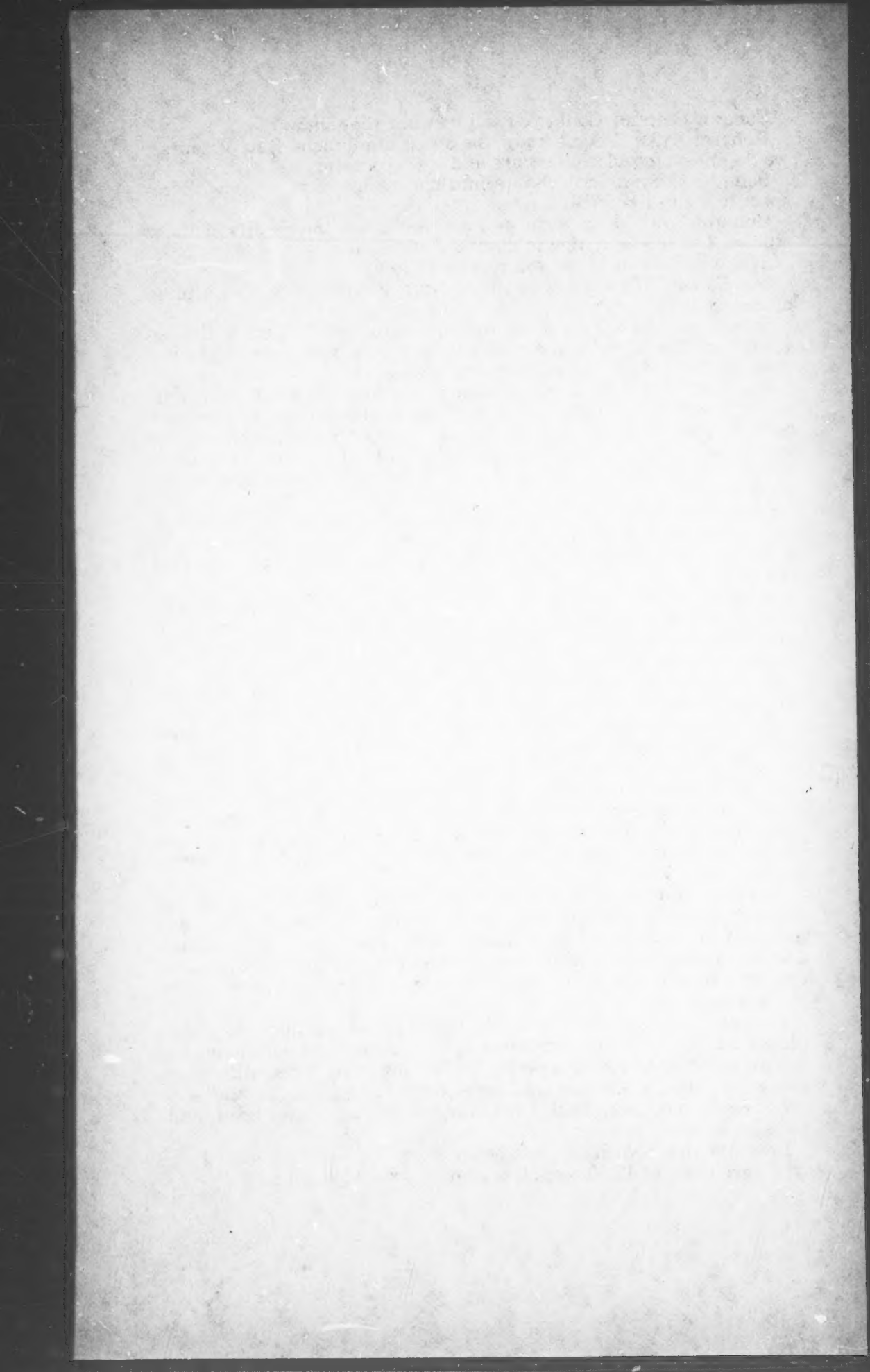
General RYAN. Senator, we have both extended and relocated boat ramps to assure access where it is feasible. And in some areas the entire inlet because of the reduced lake level does not have water, so that does not appear to be appropriate. Our holdings do not extend in those areas. But we have made those extensions. We have committed last year, 1989 \$1.6 million for extension boat ramps on the upper Great Lake Project. And we have programmed about that same amount for fiscal year 1990 to extend those ramps. Of that amount \$1.5 million is identified for work in North Dakota in fiscal year 1990.

Senator CONRAD. Well, I want to express my appreciation for you being here today. Obviously this is something we feel very strongly about. You understand that. And I hope you have had a chance and an opportunity to hear the concerns that we have and that we are able to work together to try to address those concerns as we move ahead.

I want to thank all of you for coming and participating. And please let us know the problems that you see and solutions that you would like to see us develop in Washington. After all, we are going to have to address this issue there as well as at the state level. And we appreciate the good suggestions that have been made to us by many of you.

I declare this hearing to be adjourned.

[Whereupon, at 12:50 p.m., the hearing was adjourned.]



APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

TESTIMONY

by

ROBERT E. HANSON

NORTH DAKOTA STATE TREASURER

for

UNITED STATES SENATE

WATER AND POWER SUBCOMMITTEE HEARING

PARSHALL, NORTH DAKOTA

AUGUST 25, 1989

HONORABLE KENT CONRAD, CHAIRMAN

Mr. Chairman, members of the committee, I am Robert Hanson, North Dakota State Treasurer.

Due to scheduling conflicts, I was unable to personally appear at your hearing in Parshall, North Dakota on August 25. I appreciate your allowing me to present written testimony regarding the Corps of Engineers (Corps) in North Dakota.

I, too, share the frustrations of those in the public and private sector who must deal with the Corps. I speak from first-hand experience of the inability of the Corps to provide accurate information, reports and funds to the state regarding programs for which they are responsible.

The major program which my office must deal with the Corps is commonly known as the Flood Control program.

This program requires that 75% of all monies received and deposited in the U.S. Treasury during any fiscal year for the leasing of lands acquired by the United States for flood control, navigation and allied purposes, including the development of hydroelectric power, shall be paid at the end of each year to the state where the land is located. The money is to be spent for public schools and public roads in the county(ies) where the land is located. It may also be spent for defraying any of the expenses of county government in those counties, including public obligations of levee and drainage districts for flood control and drainage improvements.

The Corps also receives money from what they refer to as "public domain" leases in this program. The federal government keeps all of this money and local governments receive nothing. The Corps also has an "abatement" program where it abates lease payments and local government receives nothing and has no say in the abatement process.

The State Treasurer's Office receives the money from the Corps and then distributes it to each affected county. The county, as required by state law, distributes 50% to affected school districts, 25% to the county for road purposes, and 25% to the affected organized townships.

My office has had problems receiving the proper information and dollars for North Dakota's share of the flood control money every single year since I took office in January 1985.

This started in January 1985, when we questioned why there was a 34% drop in revenue paid North Dakota for FY1984. We were able to uncover the fact that over \$44,000 was owed the state for payments collected by the Corps for FY1984, but which the Corps improperly placed in one of their own accounts. This represented 24% of the flood control money owed our state.

After being shuffled from one Corps bureaucrat to another over a several month period, we ended up with the very first individual to whom we talked. He finally agreed to our initial request to release the money to the state immediately. The Corps sent a supplemental payment in April 1985. The Corps original position was not to pay it until 1986.

Over the next several years the Corps' lack of adequate accounting procedures completely botched the handling of this supplemental payment. Finally, in April 1988, I called for a meeting in Bismarck with representatives from the Congressional delegation, state, counties, schools, townships and the Corps.

Following that meeting, the Corps was still unable to produce any meaningful documents substantiating their figures for the previous 5 years of payments.

I then asked the state's Congressional delegation to request a formal independent audit be conducted of the Corps. The Congressional delegation was successful in securing an audit of the Omaha district by the Army Audit Agency.

The Army Audit Agency did go to Omaha. However, according to the auditors in charge, the Corps' records were in such poor condition a true comprehensive audit could not be performed. However, their audit was responsible for uncovering that a total of \$50,000 of payments for leases in Dunn County had been misapplied by the Corps for 20 years. In addition, the same thing happened with \$475 of payments for Sioux County leases spanning 18 years. Instead of the counties receiving their 75% share of this money, the Corps turned all the money over to the Federal government during these years. In addition, due to Corps errors, 2 counties had been overpaid a total of \$608.

The audit officials also stated they found the abatement process was being inconsistently administered in a manner which was not advantageous to either state or federal government.

The Army Audit Agency informed me their recommendations to the Corps would center on (1) Establishing a uniform abatement process nationwide; (2) Computerization of lease information and receipts and sharing that information with the states; (3) Implementing procedures to cross-check receipts collected to the receipts ledger and; (4) Sending states an estimated revenue statement for each year.

Following my receiving all of the above information, I requested the Corps pay the affected counties interest at the rate the IRS charged on past due accounts for the same years. The Corps responded they couldn't pay any interest because they are not authorized to do so. I am urging you to seek authorization for the payment of interest on these mishandled amounts. I have attached a schedule of interest calculations using the above mentioned rates. (Exhibit 1).

I think we all know had the federal government been owed money for this number of years because the taxpayer had erred, there would be interest and penalty owed. Such gross mismanagement by the federal government should not be treated with any less seriousness.

Shortly after the audit was completed on the Omaha district, we received word the St. Paul district had made incorrect payments to Barnes, Griggs and Steele counties over the past several years. Barnes County had been paid amounts which should have gone to Griggs and Steele counties. The unfortunate part of this Corps fiasco is that Barnes County, in good faith during these years, had already allocated the money to the townships, county and school districts. Now the Barnes County Treasurer had to go to these entities and get the money back so she could pay Griggs and Steele counties for the Corps' error. This was done. I commend Barnes County Treasurer Barbara Brand for her outstanding cooperation and successful efforts to correct the problem created by the Corps.

One might ask how can such mispayments occur; shouldn't the counties catch this when they receive their payments. This would have validity if the Corps furnished the counties with documentation as to the leases in their respective counties. The Corps does not provide the counties with this data, even though such was being recommended by the Army Audit Agency. This information is critical if the counties are to properly fulfill the responsibilities under both state and federal law.

A schedule of payments made to the state for FY1981 through 1988, is attached. (Exhibit 2). The amount of money our counties receive from this program is virtually nothing even though the impact is great. The amounts paid in 1989 for FY1988 ranged from under \$19.00 to just under \$24,000. The average amount is \$7,310.

When one implements the distribution formula the average amounts are: Affected school districts - \$3,755; County roads - \$1,875; and Townships - \$1,875. By no stretch of the imagination are these in-lieu of tax amounts sufficient to meet the impacts experienced by the affected local units of government regarding these water projects. The inequity of this is amplified when the public domain payment and lease abatement programs of the Corps are brought into the picture.

North Dakota is not the only state having problems with the Corps' handling of this program. We received a printout, compiled by the Corps, regarding this program on a national basis for FY1985. The Corps' own document revealed 25% of the states in this program received improper amounts. The money involved in just this one year's incorrect distribution represented 8% of the total due these states. Something is obviously wrong. Corrective actions need to be taken.

In conclusion, I would ask that serious consideration be given to (1) Providing adequate reimbursement and funding to the political subdivisions for the problems associated with the federal government's taking of land for flood control; (2) Conducting a comprehensive, in-depth review of the Corps' procedures and ability to properly administer the Flood Control program; (3) Requiring the Corps to work with state and local governments and; (4) Review the abatement and public domain payment processes to insure local governments do not lose needed income.

Thank you.



STATE OF SOUTH DAKOTA

GEORGE S. MICKELSON
GOVERNOR

EXECUTIVE OFFICE
STATE CAPITOL
PIERRE, SOUTH DAKOTA
57501
(605) 773-3212

FOR IMMEDIATE RELEASE
MONDAY, AUGUST 21, 1989

UPPER MISSOURI RIVER BASIN GOVERNORS
DEFINE GOALS FOR RESERVOIR OPERATIONS

PIERRE -- The Upper Missouri River Basin Governors' Association today called on the Corps of Engineers (COE) to develop a more contemporary and responsive Missouri River management plan that gives greater emphasis to upper basin environmental values, recreation and economic benefits.

Governor George S. Mickelson, chairman of the Upper Missouri River Basin Association, called the meeting to gain a better understanding of the current rules and constraints of the COE Missouri River reservoir management and to discuss anticipated 1990 reservoir problems and long-term reservoir operation revisions.

"The Missouri River irrigation and recreation industry is a critical part of the rural economy in the Upper Missouri Basin states," Governor Mickelson said. "Improper Missouri River reservoir operations, along with the drought conditions of the 1980s, has begun to threaten the viability of our river-based."

Members of the association, including Governor Mickelson, North Dakota Governor George Sinner, Montana Governor Stan Stephens' chief of staff, Steve Yeakel, and Wyoming Governor Mike Sullivan, along with

-more-



UPPER MISSOURI RIVER BASIN GOVERNORS' ASSOCIATION
August 21, 1989

Position Statement

The Missouri River has changed slowly but dramatically over time. Once a free flowing waterway, the river was instrumental in the early development of the upper basin states. Throughout the years, the river has changed its own course, and man has attempted to harness its enormous destructive and productive power.

As stewards of the Missouri River, the basin state governors must recognize and address the changing nature of the river. The construction of the Missouri River dams and reservoirs have fundamentally changed the flow of the river, and yet the river is continuing to evolve and develop in form and use. Clearly, the most dramatic example of this change is the tremendous growth over the last 20 years in the recreational/fishing and hunting industry that has developed along the river. The fishing, hunting, camping and other recreational uses of the Missouri River must be recognized as a critical, high priority factor in our environmental quality of life and economic well-being.

We have not, and will not, abandon the original goals and objectives of the Missouri River Pick-Sloan program. In essence, the Pick-Sloan program was intended to stimulate our rural economy, and rural economic development remains as one of our greatest needs and highest priorities. We are renewing our commitment to pursuing and securing sound Pick-Sloan water development including irrigation projects and rural/municipal water supply projects. These projects are a vital component of our rural economic development goals, and we look forward to working closely together with the water community, public power interests, our congressional members, and other involved groups in seeing the construction of Pick-Sloan water projects.

The drought conditions of the 1980s now threaten the outdoor recreation industry, municipal and rural domestic water supplies, and the irrigation that has developed along the Missouri River reservoirs. Hydropower production has been substantially reduced, and it may be several years before hydropower generation returns to normal averages. The fisheries resources is under stress due to a shrinking habitat and forage base. The potential exists next year, with optimum water level management, to prevent further stress and to enhance the fishery by inundating vegetation that has been exposed during the last couple years. If water levels continue to recede, problems with the fishery will develop that require a longer recovery period.

Meanwhile, resort owners and the public struggle with difficult boating access, the loss of protected marina basins, and the uncertainty that access can be maintained. If water levels should recede a few feet lower than the record low water we are experiencing this year, a major part of our economy will be seriously hurt.

The upper basin governors agree that:

- 1) The upper basin states should be given the same consideration during a prolonged drought that lower basin states are given when the potential exists for flooding. To achieve this goal, we believe that reservoir operation plans and priorities should be adjusted to recognize contemporary needs, changing values and the contribution the upper basin states have made to the operation of the entire river system;
- 2) the upper basin states should be provided a minimum water level much higher than the current Master Manual, and our rights to use of Missouri River waters should be clearly established;
- 3) in the short-term, every option to conserve water in the upper basin should be explored and implemented wherever practical until the effect of the current drought is behind us and, for the balance of this year, a reduction in releases to re-establish reservoir levels above current levels; and,
- 4) in the long-term, environmental values and recreation, including fishing, the upper basin must be afforded their deserved value and ranked much higher in priority by the Corps of Engineers in the operation of the reservoirs. It does not appear unreasonable that these benefits should be ranked at the same level as irrigation, domestic water supply, and other upstream beneficial consumptive uses, second only to the purpose of flood control.

MISSOURI RIVER: A TIME FOR ACTION

September 13, 1989

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- III. TOURISM AND RECREATION FACT SHEET
- IV. IRRIGATION FACT SHEET

1944 FLOOD CONTROL ACT

(O'Mahoney-Milliken Amendment)

"The use for navigation, in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in states wholly or partly west of the ninety-eighth meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in states lying wholly or partly west of the ninety-eighth meridian of such waters for domestic, municipal, stock water, irrigation, mining, or industrial purposes." (1944 Flood Control Act, Sec. 1b.)

UPPER MISSOURI RIVER BASIN GOVERNORS' ASSOCIATION

August 21, 1989

Final Position Statement

The Missouri River has changed slowly but dramatically over time. Once a free flowing waterway, the river was instrumental in the early development of the upper basin states. Throughout the years, the river has changed its own course, and man has attempted to harness its enormous destructive and productive power.

As stewards of the Missouri River, the basin state governors must recognize and address the changing nature of the river. The construction of the Missouri River dams and reservoirs have fundamentally changed the flow of the river, and yet the river is continuing to evolve and develop in form and use. Clearly, the most dramatic example of this change is the tremendous growth over the last 20 years in the recreational/fishing and hunting industry that has developed along the river. The fishing, hunting, camping and other recreational uses of the Missouri River must be recognized as a critical, high priority factor in our environmental quality of life and economic well-being.

We have not, and will not, abandon the original goals and objectives of the Missouri River Pick-Sloan program. In essence, the Pick-Sloan program was intended to stimulate our rural economy, and rural economic development remains as one of our greatest needs and highest priorities. We are renewing our commitment to pursuing and securing sound Pick-Sloan water development including irrigation projects and rural/municipal water supply projects. These projects are a vital component of our rural economic development goals, and we look forward to working closely together with the water community, public power interests, our congressional members, and other involved groups in seeing the construction of Pick-Sloan water projects.

The drought conditions of the 1980s now threaten the outdoor recreation industry, municipal and rural domestic water supplies, and the irrigation that has developed along the Missouri River reservoirs. Hydropower production has been substantially reduced, and it may be several years before hydropower generation returns to normal averages. The fisheries resources is under stress due to a shrinking habitat and forage base. The potential exists next year, with optimum water level management, to prevent further stress and to enhance the fishery by inundating vegetation that has been exposed during the last couple years. If water levels continue to recede, problems with the fishery will develop that require a longer recovery period.

Meanwhile, resort owners and the public struggle with difficult boating access, the loss of protected marina basins, and the uncertainty that access can be maintained. If water levels should recede a few feet lower than the record low water we are experiencing this year, a major part of our economy will be seriously hurt.

The upper basin governors agree that:

- 1) The upper basin states should be given the same consideration during a prolonged drought that lower basin states are given when the potential exists for flooding. To achieve this goal, we believe that reservoir operation plans and priorities should be adjusted to recognize contemporary needs, changing values and the contribution the upper basin states have made to the operation of the entire river system;
- 2) the upper basin states should be provided a minimum water level much higher than the current Master Manual, and our rights to use of Missouri River waters should be clearly established;
- 3) in the short-term, every option to conserve water in the upper basin should be explored and implemented wherever practical until the effect of the current drought is behind us and, for the balance of this year, a reduction in releases to re-establish reservoir levels above current levels; and,
- 4) in the long-term, environmental values and recreation, including fishing, the upper basin must be afforded their deserved value and ranked much higher in priority by the Corps of Engineers in the operation of the reservoirs. It does not appear unreasonable that these benefits should be ranked at the same level as irrigation, domestic water supply, and other upstream beneficial consumptive uses, second only to the purpose of flood control.

SD PRESS ASS'N
CLIPPING BUREAU
BOX 2230
BROOKINGS, SD
57007

JUL 28 1989

MCBRIDE

EDITORIALS

OUR VIEW

Legal action is necessary

It is becoming ever so clear that the Corps of Engineers has come to the immovable position that South Dakota will bear the brunt of the Great Plains drought when it comes to water management of the Missouri River reservoir system.

We feel it is now time to take legal action to begin establishing our state's legal rights to the water we hold within our boundaries. At least one organization, the Great Lakes of South Dakota Association, agrees. On Monday, the board of directors of that organization passed a resolution calling for the state to begin work on establishing legal rights to the water in the Missouri River reservoirs.

Corps officials have proven time and time again that they cannot be trusted at their word. We should have learned that lesson years ago when the reservoir system was first being built. Corps officials "promised the world" to communities and landowners along the Missouri River in return for their giving up the rich fertile bottomland. Out of the promises of flood control, cheap electricity and vast recreation resources, only the flood control promises have come to full fruition. The cheap electricity generated at the hydroelectric plants at the dams are shipped out of South Dakota, while the people who gave up the lands get their higher-priced power from coal generating plants out of state. Over the years, the Corps has attempted to renege on its promises

of providing recreation facilities and opportunities. Faced with cutbacks from the Corps, the state took over management and maintenance of many of the recreation facilities along the river, and now the Corps has started cutting back on the few remaining recreation areas under its area of responsibility within South Dakota. When communities and developers have looked at providing facilities on their own, the Corps has mostly provided bureaucratic roadblocks that, in many cases, have killed projects or seriously delayed them.

The latest series of broken promises have to do with the water levels of Lake Oahe. In May, the Corps promised Gov. George Mickelson that it would maintain the water level of Lake Oahe until the end of July, and then would start to drop the levels reaching a new record low in September. The words had barely cleared the mouths of the Corps officials when the water levels of Oahe began dropping. Since May 3, the levels of Oahe have dropped 3.9 feet to 1,588.60 feet as of today (Wednesday). That is just 33 of a foot short of the record low of 1,588.27 feet set Nov. 14, 1988.

Corps officials started dropping the reservoir right during the walleye spring spawning season. State officials are unsure of how many of the walleye eggs were left exposed to the air and died while the water levels in the Moreau and Grand

river spawning sites dropped. It was enough of a concern however, that the state, for the first time ever, restocked walleye in this area.

The Corps plans to draw down the Oahe Reservoir many more feet before the end of the year.

Right now, the bay at Jed's Landing, along with the new boat ramp there, is completely dry - it's been dry all year. The marina at Indian Creek is threatened. If the water level is allowed to drop to 1,542 feet, the WEB Water Development Association's intake will be out of water. WEB officials, already unsure of Corps of Engineers promises, have begun designing a massive intake extension project, and bids could be let as early as this fall on that project.

State and local officials have tried working with the Corps of Engineers to get them to treat the state equally with other states, but all attempts have failed miserably. Even attempts by South Dakota's congressional delegation have failed to bring fair treatment by the Corps.

Governor Mickelson requested that the Corps delay releases for the downstream navigation season by one week this year because of the drought, but Corps officials flatly refused the request. The Corps has signed contracts with barge traffic interests, and has decided to fulfill the water level requirements of those contracts at the expense of water levels in South Dakota. North Dakota and Montana reservoirs

have not dropped this summer - they have gone up in elevation. Basically, Lake Oahe has been the main reservoir providing the water needed downstream for the navigation season.

Mayor Darrell Bender, while viewing an National Guard bridge building exercise in Sioux City this spring said that the Missouri River there was flowing bank-to-bank at 7 feet per second. That water was all passing through Lake Sharpe and Lewis and Clark Lake from Lake Oahe.

If the Corps feels obligations to honor only contracts, then the state should take legal action to force the Corps to make a contract with South Dakota to insure minimum water levels on our reservoir systems. At the very least, the contract should call for all states to share equally in any drought-related low water levels. Why should South Dakotans suffer while barge operators enjoy normal conditions?

We urge the South Dakota Legislature to also become involved in this issue, and direct the South Dakota Attorney General's office to begin taking legal actions to establish this state's water rights on the Missouri River system.

We cannot, and should not, allow the Corps to deny the wishes of the people who gave up the lands for the reservoir system in the first place.

-Larry Anderson

DOMESTIC WATER USE FACT SHEET

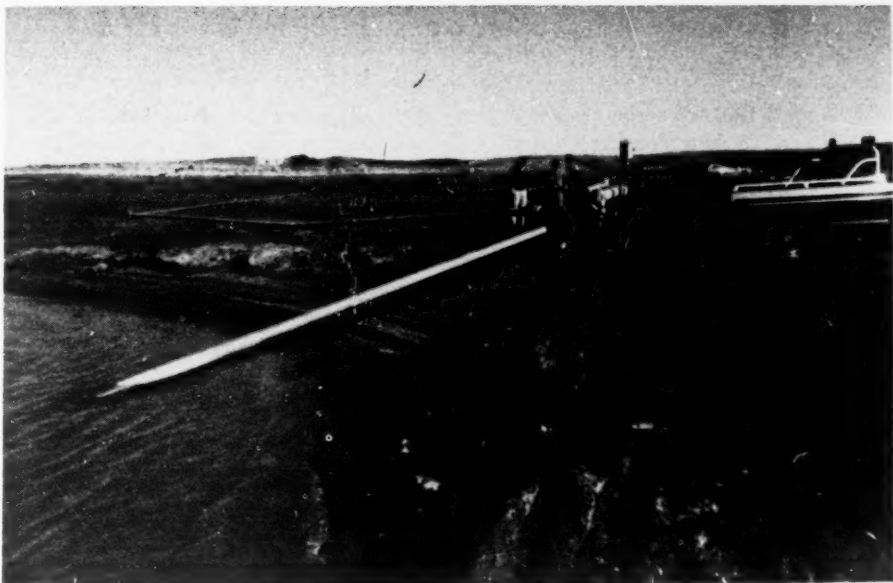
There are currently twelve municipalities and seven rural water systems (which supply domestic water to an additional forty seven communities) that utilize the Missouri River as their primary water supply. Over 73,378 citizens are presently served by the Missouri River in South Dakota. This reliable water source provides the economic stability necessary for these communities to survive in rural South Dakota

Municipalities	Population
1. Wakpala	250
2. Mobridge	4,174
3. Gettysburg	1,623
4. Fort Thompson	300
5. Lower Brule	300
6. Chamberlain	2,258
7. Oacoma	289
8. Pickstown	260
9. Platte	1,334
10. Lake Andes	1,029
11. Springfield	1,377
12. Yankton	<u>12,011</u>
TOTAL	25,205

Rural Water Systems	Communities Served	Population Rural and Domestic
1. Aurora Brule	4	4,386
2. B-Y Phase I	4	3,415
3. B-Y Phase II	6	8,050
4. Oahe Plains		180
5. Randall II	5	4,810
6. Randall III	3	3,584
7. Tri County	*3	6,148
8. WEB	<u>22</u>	<u>17,600</u>
TOTAL	47	48,173

* Also, 27 small Indian Communities served

Proposed Rural Water Systems Served	Communities Served	Population Rural and Domestic
1. Mni Wiconi	25	20,000
2. Mid Dakota RWS	<u>23</u>	<u>29,000</u>
TOTAL	48	49,000



Tri-County Rural Water system pumping station south of Eagle Butte. Irrigation pump shown was used for a time after the regular pump was left dry by receding water.



Tri-County Rural Water system pumping area. Note original shoreline in foreground, and extension pipes leading to the relocated pumps in the water.

TOURISM AND RECREATION FACT SHEET

Tourism is South Dakota's second largest industry, and a key component of that industry is the Missouri River. The four Missouri River reservoirs in South Dakota are used extensively for water-based recreation activities; the top three recreation uses include fishing, boating and camping. Other popular activities include sailing, waterskiing, and waterfowl hunting.

* Visitation in 1987 at Lake Oahe was 3.1 million visitor days making it one of the leading tourism and recreation attractions in the Midwest. By comparison, visitation last year at Mount Rushmore National Memorial in the Black Hills of South Dakota was 2.1 million and Yellowstone National Park in Wyoming estimated their visitation at 2.2 million visitor days. Lake Oahe visitation accounts for fully one-third of all visitors utilizing the six mainstem reservoirs developed as part of the Pick-Sloan Act. According to the statistics provided by the Corps of Engineers, the following is a list of visitor hours recorded at each reservoir in 1988:

Lake Oahe	15.7 million visitor hours
Lake Sakakawea	10.6 million visitor hours
Lewis and Clark Lake	8.7 million visitor hours
Lake Francis Case	7.2 million visitor hours
Lake Sharpe	3.5 million visitor hours
Ft. Peck	1.7 million visitor hours

* Visitor spending in South Dakota has increased an average of 9 percent each of the last four years. Along the Missouri River, however, visitor spending has increased by nearly 14% annually during the same time frame. A 1983 study on the economic value of Missouri River recreation estimated resident and non-resident expenditures for fishing, hunting and recreation on the four reservoirs in South Dakota at over \$156 million annually.

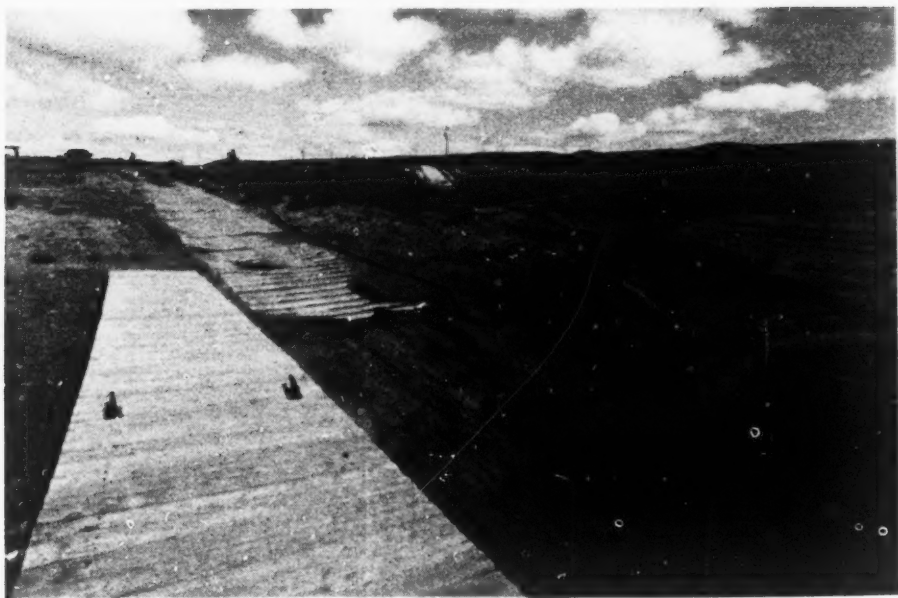
* Fishing is the most popular recreation activity on Lake Oahe, but the fisheries resource is currently under stress due to a shrinking habitat and forage base resulting from the falling water levels. The salmon fishery recently developed by the state has already been seriously threatened resulting in much smaller fish and a reduction in salmon fishing activity in 1989. If water levels continue to recede, problems with the walleye fishery will also develop that require a long recovery period. With optimum water level management, however, further stress can be prevented and enhancement can be accomplished by inundating vegetation that has been exposed during the last couple years.

* Boat access to the water is absolutely critical for recreation on Oahe Reservoir, and has been seriously threatened by low water levels. Only sixteen of thirty boat ramp sites on Lake Oahe in South Dakota were functional on Labor Day Weekend, 1989. Those ramps that remain are nearly 300 feet long, experience overcrowded conditions, and generally provide stressful launching conditions.

* Future development of the Missouri River is a high priority for the state. In 1988, South Dakota formulated a plan for resort and recreation service development along the Missouri River, but implementation of this plan will be ineffective at best if water levels are continually threatened. Developers require consistent markets, and low water levels are a deterrent to the water-based recreation market.



Boat ramp at Forest City Lakeside Use Area.



Boat ramp at East Whitlock Recreation Area. Note original ramp at upper center of photo, now 120 yards from water. Shoreline receding from new ramp as well.



West Pollock Recreation Area boat ramp and bay.



Boat ramp at Jed's Landing near Mobridge.



Indian Memorial Recreation Area. Note original shoreline in foreground.



Jed's Landing near Mobridge. Note diminished size of marina area bounded by original shoreline (driftwood in foreground).

IRRIGATION FACT SHEET

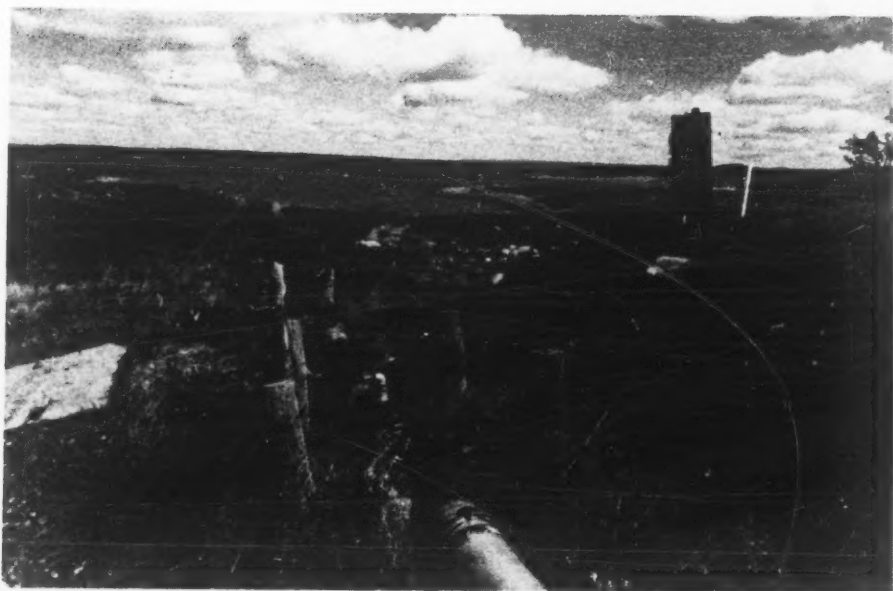
- There are currently 350 water permits issued for irrigation along the Missouri River in South Dakota. This totals 193,012 acres of irrigable lands.
- The land value of the 193,012 acres when all acreage is developed is \$77 million.
- The annual yield for the permitted acreages (assuming \$2.00/bushel corn) for an average year is worth approximately \$58 million.
- There are over 100 irrigation easements on Lake Oahe, and approximately 80 irrigation easements on Lake Francis Case. An estimated 80% of the irrigation easements on Lake Oahe have experienced intake problems this year, requiring expensive intake modifications or loss of the irrigation system.
- Of the 190,000 acres permitted, about 80,000 acres of irrigation have actually been developed. The existing 80,000 acres of irrigation can provide corn cut for silage sufficient to winter over 640,000 head of beef cows, or approximately 42% of all beef cows in South Dakota.
- Due to the recent drought, interest has increased in developing the remainder of the permitted acres and the number of new permit applications received by the state has increased almost 300 percent compared to last year. A major concern and obstacle to securing such development and obtaining the economic benefits associated with irrigation is the lack of stable reservoir water levels.
- Intake extensions including pumps, pipe and additional wiring can cost as much as \$30-\$40 per foot. Adding pumps and pipe, however, is not always possible due to limitations such as distance, pump efficiency, and system operational pressure. Many irrigators have invested in irrigation systems which initially cost \$100,000-\$200,000; these same irrigators must pay \$5,000-\$10,000 this year just to become operational again.



Governor Mickelson inspects irrigation system at Roger Vandervorst ranch. Note original shoreline and distance to present waterline.



Irrigation pipes at Orlow Eidam ranch. Pump can be seen in the distance; Mr. Eidam has had to add 270 feet of pipe to reach the present waterline.



Irrigation system at Orlow Eidam ranch. The irrigation pump had to be moved from near the four posts to a location nearer the water.



Irrigation system at Orlow Eidam ranch. Note distance from present shoreline to old shoreline near large boulders.



DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

October 23, 1989

1989 OCT 25 11 36

REPLY TO
ATTENTION OF:

CECW-EH-W

Honorable Kent Conrad
United States Senate
Washington, D.C. 20510-6175

Dear Senator Conrad:

I am writing in furtherance of our discussion about Missouri River mainstem reservoir system water control management issues that we had with Senator Burdick in his office on September 14th. Our discussion of these matters was beneficial and I assure you that the Corps of Engineers will be reviewing the low lake level situation that has developed during the 1987-1989 drought to identify any short term and long term measures that we can take to improve it and/or mitigate its impacts.

My staff and I have reviewed the implementation of the water control plan during this drought. We have concluded that the Missouri River Division Engineer and his staff have managed the storage and release of water from the Missouri River reservoirs to meet authorized purposes in an appropriate manner under most difficult conditions.

Management of a system of reservoirs to meet multiple authorized purposes necessitates balancing the needs of those purposes in order to provide the greatest public benefit in the region. During periods when water is in short supply, the competition between purposes grows and the beneficiaries of each particular purpose become concerned about their special need being met. In the Missouri River basin, drought has brought about a shrinking supply of water and, consequently, many concerns are being expressed.

The severe impacts of the 1930's drought in the Missouri River basin demonstrated how vital water was to the basin's future and gave impetus to the formulation of the plan for the Missouri River main stem reservoir system during the early 1940's. During that period basin residents had experienced significant hardships due to lack of water. Major objectives during the formulation of the comprehensive plan were the need to control flooding, to provide dependable navigation on the river, to provide water for irrigation, to produce hydroelectric power, and to provide a safe and dependable supply of water for domestic and industrial purposes. Recreation opportunities and fish and wildlife enhancement were also elements of the plan. All of these multiple purposes were needed to improve the economic climate within the basin.

In order for the basin's economic improvements to be realized, the system of reservoirs that was planned, designed and constructed requires large amounts of water to be stored in periods of high runoff for use during extended

droughts, such as that which we are now experiencing. The six main stem reservoirs were built to provide a total storage capacity of 73.9 million acre-feet, 53 percent of which was reserved as carryover conservation storage to serve the authorized multiple purposes during droughts.

The water control management plan is inherently based on the economics of the formulation of the reservoir system. The Missouri River Division has developed a water control management plan for the reservoir system that is predicated on providing benefit, as envisioned in the authorizing legislation, to all the authorized purposes. It was reviewed during development by a committee composed of representatives appointed by the governors of the ten basin states and Federal agencies. The policies generated in this coordinated manner during the planning and design of the reservoirs were embodied in the water control plan. Those policies placed highest priority on flood control, and then, in descending priority, the following conservation purposes: upstream water uses for beneficial consumptive purposes; downstream municipal and industrial water supply and water quality requirements; releases from Gavins Point Dam to provide equitable service to navigation and hydropower; adjustment of releases from the reservoirs upstream from Gavins Point for efficient generation of power to meet the area's needs consistent with other uses and power market conditions; and to provide benefits to in-lake and open river recreation and fish and wildlife. The plan is subject to public review and comment at meetings throughout the basin each year and, in response to changing conditions and needs thusly identified, adjustments are made to the plan on an annual basis.

The master water control manual includes a comprehensive plan for meeting the multiple purposes during a drought of long duration like that of the 1930's. The goal of the regulation plan is to spread the drought's negative impacts across all the congressionally authorized purposes. It also incorporates the philosophy that for each year the drought continues, greater conservation measures are enacted, i.e., less water is released to meet downstream needs in order to retain storage for satisfaction of the needs in subsequent years. By its very nature the low flow regulating plan is basically one of water conservation and thus it greatly benefits in-lake uses. In fact, application of the plan this year will conserve 4.4 million acre-feet of water in the system's reservoirs.

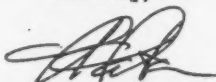
As you know, drought conditions in the Missouri River basin are extreme. There hasn't been a deeper-than-average snowpack in the Rocky Mountains above Fort Peck and Garrison dams since 1982. Although last winter's snowpack was near normal, runoff from the snowmelt was less than expected because the dry soils absorbed much of the water. As a consequence of this and the fact that little rain fell this summer, runoff for 1989 is forecast to be only 76 percent of average. This compares with 85 percent in 1987 and the 50 percent experienced last year, which was the fifth lowest runoff since recordkeeping

began in 1898. The current drought, which is the worst in two decades to affect the Missouri River basin, has negatively impacted the mainstem reservoirs, the open water reaches of the Missouri River between the reservoirs and the entire middle and lower Missouri River below the reservoir system from Gavins Point Dam downstream to St. Louis. Even with the significant conservation measures set forth in the operating plan, it will still take six consecutive years of average runoff to refill the reservoir system to normal operating levels. Under the water control plan, the negative impacts of the drought on the mainstem reservoir system have been shared among all the project purposes.

It is our view that the Missouri River reservoir system is being operated for the widespread public benefit of the region consistent with the current water control plan. Nevertheless, I believe that the water control plan should be reviewed in light of changes that have occurred in the basin since the last comprehensive review was completed in 1979. In recognition of this need the Missouri River Division Engineer has taken steps to initiate the formal review process.

Our hope is that there will soon be a return to normal hydrologic conditions in the Missouri River basin so that the drought's negative impacts on all the beneficiaries of the system can be progressively eliminated.

Sincerely,



H. J. Hatch
Lieutenant General, U.S. Army
Chief of Engineers



CITY OF *Williston* NORTH DAKOTA

October 16, 1989

Distinguished Committee
on Energy & Natural Resource
Subcommittee of Water & Power

Dear Honorable Vice Chairman Kent Conrad:

In reference to the hearing held on October 9, 1989, in Bismarck on the Upper Missouri River Basin impacts on the low water level in the reservoirs, we would like to offer these thoughts.

It is important that recreation be equated to tourism and economic development and not play as the Corp of Engineer's Master Plan may feel it is. For the sacrifices that Western North Dakota gave up for the Garrison Dam, recreation was the only benefit we received, but that benefit is marginal at best if the Corp can "taketh away", by large lake level fluctuation, as they feel is allowable under their Master Plan. The lake could attract a sizable amount of tourism and economic development, if the people can be assured of a reasonable lake level fluctuation to plan developments and promote such enterprises without having years of high and dry boat ramps with weeds and mud flats.

It seems that under the Master Plan that the key word listed in the second priority is "consumptive" use. Recreation should be redefined to mean tourism-economic development that requires a certain water level range for realistic use, thereby being consumptive in nature. If the navigation industry can have specific minimum flows at Sioux City, Omaha, etc., then it seems the Plan can address minimum lake levels for our economic development.

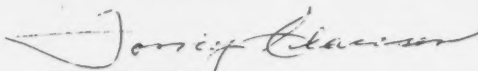
The navigation and recreational uses are both economic development factors for their regions, but the navigation industry gets a higher priority over our area interests. This is an injustice, since this is the only benefit we received in Western North Dakota for our sacrifices, as the southern navigation states received flood control as well as putting flood plain lands back into productive use as pointed out so well by former Governor Guy.

Honorable Vice Chairman
Kent Conrad
Page 2
October 16, 1989

Finally, the Presidential abolished Missouri River Basin Commission or Interagency needs to be reenacted to allow the people some say in the operations of river/lake so to take it out of the full control of a bureaucracy that loses touch with the people who they are really representing. The Corp of Engineers should be a technical advisor to the Commission that operates the river/lake operations. Care must be given to the make-up of the Commission in order to ensure that the more populated Missouri River Basin states have no more control than the less populated states such as North and South Dakota.

We appreciate your fine job of conducting the hearing and the effort taken to bring the hearing to the doorsteps of people who are affected. Williston has some unique concerns that are caused by the Garrison Dam, that are somewhat different from the hearing purpose, which we are adding as an attachment for your deliberation.

Sincerely yours,



Tomy Clausen
Vice President, City Commission

MCM/rj

10/13/89

Honorable members of the sub-committee on Water and Power of the Senate Committee on Energy and Natural Resources.

My name is Gene Emery, Director of Public Works for the City of Williston, ND

The City of Williston lies in the extreme northwest corner of North Dakota, 18 miles from the Montana boundary and 60 miles South of the Canadian border. It also lies on the upper end of Lake Sakakawea, approximately 10 miles downstream from the confluence of the Yellowstone & Missouri Rivers. The City of Williston is protected from flooding caused by the Garrison Dam, by seven (7) miles of dikes.

The City of Williston has been impacted greatly by the Garrison Dam, with little or no benefit in return. The lake covers thousands of acres of our rich river bottom lands and has taken the Lewis & Clark and the East bottom of Buford-Trenton Irrigation District, which has been a severe economic loss to our city. The city has been greatly affected by the silt deposit or aggradation on the upper end of the lake at Williston.

According to the Corps of Engineers' records, prior to the building of Garrison Dam, approximately 47,000 acre feet, or 100,000,000 (one hundred million) tons of silt flows by Williston each year, most of this silt coming from the Yellowstone River. After the Dam was built and had filled to near capacity, this 100,000,000 tons of silt that flowed past Williston, is now being deposited on the upper end of the Lake, which is at Williston. This deposit of silt is raising the bottom of the river and forming a delta.

The aggradation problem on the upper end of the lake has caused this community problems with the following:

- (1) The water supply intake for our city located at the Lewis & Clark Bridge west of Williston.
- (2) High water tables in our city and portions of the Buford-Trenton Irrigation Project.
- (3) Mosquito breeding areas on the mud flats on Corps of Engineers' land adjacent to our city.

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THE WATER SUPPLY INTAKE AT LEWIS & CLARK BRIDGE

The City of Williston has three (3) water intakes at the Lewis & Clark Bridge west of the city. Two (2) of the intakes are attached to the concrete piers of the old Lewis & Clark Bridge. These intakes were constructed in 1960 when the new water plant was built. The third water intake is a free standing intake, constructed in 1982 by funds appropriated by Congress to the Corps of Engineers. At the present time, two (2) of the three (3) intakes are completely covered with sand. The intake that was constructed in 1982 is still serviceable.

We are concerned that the continuation of silt deposits at this location will jeopardize this water intake, and we also have concerns that the river will stay its course and will continue to flow under the Lewis & Clark Bridge as it is at this time.

HIGH WATER TABLE IN THE CITY AND PORTIONS OF THE BUFORD-TRENTON IRRIGATION PROJECT.

Since the Garrison Dam was constructed, the City of Williston has experienced problems with high water tables in our city. These high water tables cause problems with added maintenance to our street system and also cause most residents to have sump pumps installed in their basements. I understand that this is also a problem with portions of the Buford-Trenton Irrigation Project. The problems with the high water tables seem to be related to the silt deposit raising the bottom of the lake, causing a higher than normal river elevation. FOR EXAMPLE: 10/09/89 - River elevation at the Lewis & Clark Bridge - 1845.2 ft. Elevation at the Dam - approximately 1822 ft.

MOSQUITO PROBLEMS ON CORPS OF ENGINEERS' LAND ADJACENT TO WILLISTON.

As stated before, the silt deposits and aggradation at the upper end of the Lake cause large acres of mud flats with old river channels, which are subject to flooding as the pool level fluctuates. When these areas flood

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during the spring of the year and during the June snow melt from the mountains, these areas become ideal breeding grounds for mosquitoes. Mosquito control measures become a necessity in Williston. Once the mosquitoes hatch, they are attracted to Williston by lights and are helped along by our prevailing winds which average 10 to 11 miles per hour from a southeasterly direction for the months of April through July, and change to the southwest for the rest of the summer. Once they have finished a blood meal, the mosquitoes return to the mud flats to lay their eggs - and the cycle continues.

The City of Williston has spent thousands of dollars over the last four (4) years on mosquito control, and the results have not been successful.

Mayor Ditsworth of Williston, testified before the House Appropriations Committee during the hearings on pool elevation for Garrison Dam, February 18, 1954. Mayor Ditsworth stated that Williston's concerns with Garrison Dam were the problems of silt and aggradation at the upper end of the lake at Williston. (COPY OF STATEMENT ATTACHED.) General Potter of the Corps of Engineers, stated that this would not be a problem, and we would not experience any aggradation for at least 50 years - and it may never rise. (COPY ATTACHED.)

When the Department of Interior gave its approval to the operating pool level of 1850 feet for Garrison Reservoir, it was specifically conditioned on agreement that the Corps of Engineers would fully protect the City of Williston from any adverse effects due to the reservoir. The text of the statement of then Acting Secretary of Interior, Ralph A. Tudor, to Major General Samuel D. Sturgis, Chief of Engineers, was as follows:

"This agreement is made with the understanding that the Corps of Engineers will fully protect the Bureau's Buford-Trenton Irrigation Project, the State of North Dakota's Lewis & Clark Irrigation Project, and the City of Williston from any adverse effects due to the reservoir."

As stated before, Williston has been impacted greatly by the Garrison Dam. The majority of our problems, as stated, has been the aggradation of the lake here at Williston, causing the flooding of thousands of acres of Corps land several times during the summer months; it has affected our water supply intake; the high ground water level within the city; the unsightliness of the mud flats; and the severe problems we are having living with the mosquitoes.

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CLOSING STATEMENT:

We need your congressional support and the support of the Corps of Engineers to help reverse the adverse effects at Williston caused by the Garrison Dam. Besides the problems created by the siltation, the only marginal benefit that the Williston area received by the Dam, recreation is being turned into chaos by the huge lake fluctuation.

Thank you.

Respectfully,



Gene Emery,
Director of Public Works



Frank Underhill,
City Commissioner

GE:FU/ch

Attachments: 2

STATEMENT OF THE HONORABLE NEUMAN DITSWORTH, MAYOR OF WILLISTON, BEFORE
THE SUBCOMMITTEE ON CIVIL FUNCTIONS AND MILITARY CONSTRUCTION OF THE HOUSE
APPROPRIATIONS COMMITTEE DURING HEARINGS ON THE POOL LEVEL OF THE GARRISON
DAM IN NORTH DAKOTA.

February 18, 1954

Honorable Members of the House Appropriations Committee: My name is W. N. Ditsworth. I am Mayor of the City of Williston, North Dakota. I am here representing the entire population of our city to prove to you that the Army Engineers are very unnecessarily doing our city a gross injustice in trying to waste taxpayers' money to force the people of Williston to live behind dikes.

There appears to be only one reason for creating this situation, and that is the insistence of the Army Engineers, without any regard for cost, that the operating pool must be at 1850.

They propose to protect our city and our irrigation projects by constructing an extensive system of dikes and pumps at an initial cost of over thirteen million dollars and with an annual operating cost estimated at one hundred ten thousand dollars.

They further propose to build a new intake line about five miles in length on which they have not submitted any cost figures. Also to install a sewerage pump station to lift the municipal sewerage over the dike and into the reservoir. Neither of these additional expenditures have been included in their estimate of over thirteen million dollars.

However, the problem that we fear most is that of the extensive silt deposits which will be left at our front door. We all know when a stream flows into a still body of water it will deposit its silt. The Wind River in Wyoming, which is a branch of the Big Horn, is an extremely muddy river. After the Boyson dam in eastern Wyoming was completed last year, the river below the dam became crystal clear. According to figures furnished by the Army Engineers, about 47,000 acre feet of silt flow past Williston every year. At an operating level of 1850 feet virtually all that silt will be deposited opposite the city of Williston and our irrigation projects.

levees over the life of the levees represents an enormous sum of money. Capitalized, it amounts to \$4.5 million plus. The point is that these people put up is admittedly one that requires the payment for this land of more than its present appraised value.

PER ACRE VALUE OF LAND

Senator THYE. May I ask at that point, what would be the value that you would have to pay per acre for this land?

General POTTER. In one irrigation district it amounts to about \$205 an acre. I would like to correct that, if necessary. In the other irrigation district on the average it would be about \$235 per acre.

Senator THYE. How many acres are involved?

General POTTER. There are, in one case, about 2,500, and in the other case, I believe a similar amount.

FREQUENCY OF FLOODING

Senator THYE. Would this land be permanently flooded, or would it be just at high water?

General POTTER. No, sir. The Buford-Trenton Irrigation District, sir, would be flooded only about as often as it is today, at least, for some 50 years. In other words, it would be usable.

Senator THYE. How do you account for the 50 years?

General POTTER. Normally, we amortize our projects at 50 years.

Senator THYE. I grant you that, but you say at least for 50 years. I wonder what would cause a higher water at the end of 50 years?

CHANNEL AGGRADATION

General POTTER. The 50 years has no magic as far as that is concerned, sir. There is a problem in the future of a potential aggradation in the upper end of the valley, but our studies today indicate that it will be many years, probably more than 50 before this becomes a problem, and it may never arise.

Senator THYE. But the area is subject to floods now and it would continue to be subject to floods and only at rare times or conditions of high rainfall would you have a condition that would be aggravated because of your installations at Garrison Dam. Therefore, if the farmer were permitted, he could probably go on and till or operate on a lease contract this land and have it serviceable, even though there was no dike there to protect against some high winds or excessive high waters?

General POTTER. In Buford-Trenton, you are exactly right. And within the limit of your life and my life, they will never notice the difference, because of the 1,850 for Buford-Trenton.

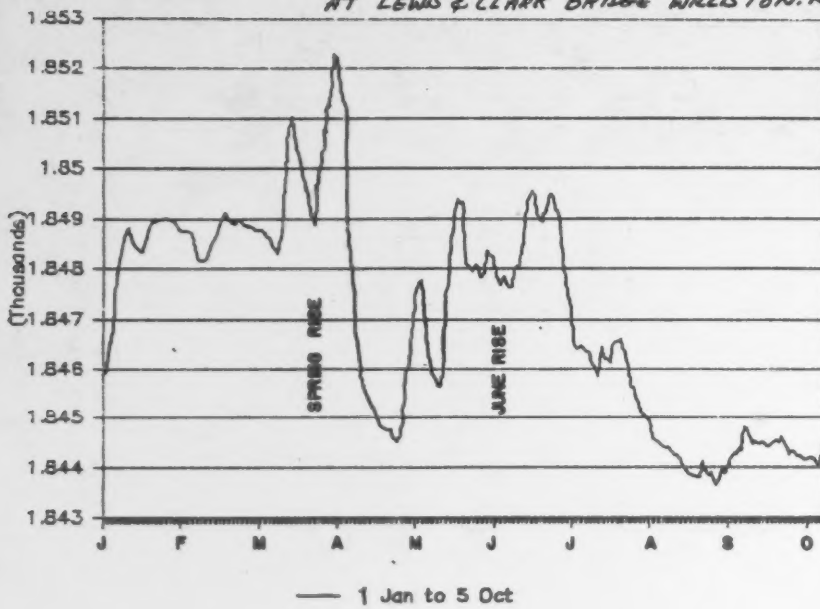
REASON FOR BUILDING LEVEES

Senator ELLENDER. What caused the engineers to take the position that this money should be spent if the flood danger is not increased? I do not know why we should build the levees at all, why buy the land or do anything at all about it?

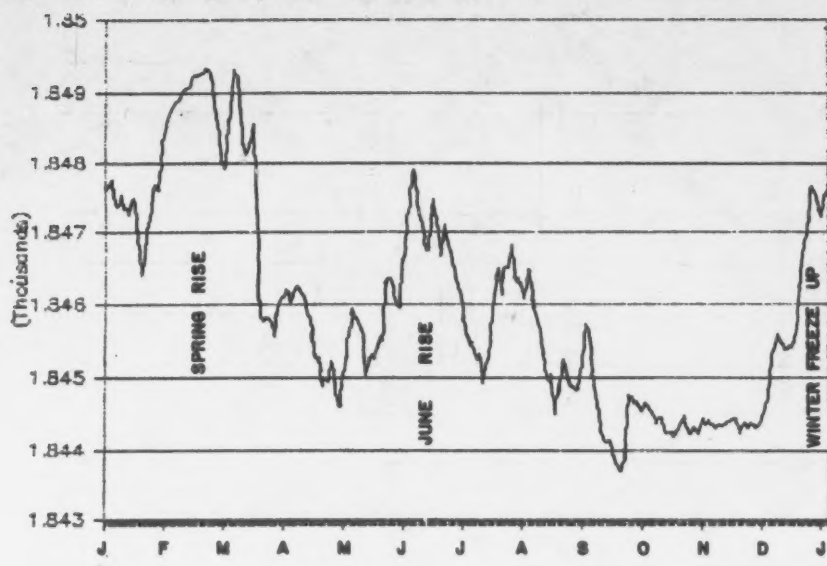
General POTTER. Because I do not believe that the Government should be a part of an operation that has a potentiality for flooding.

river elev. 1989

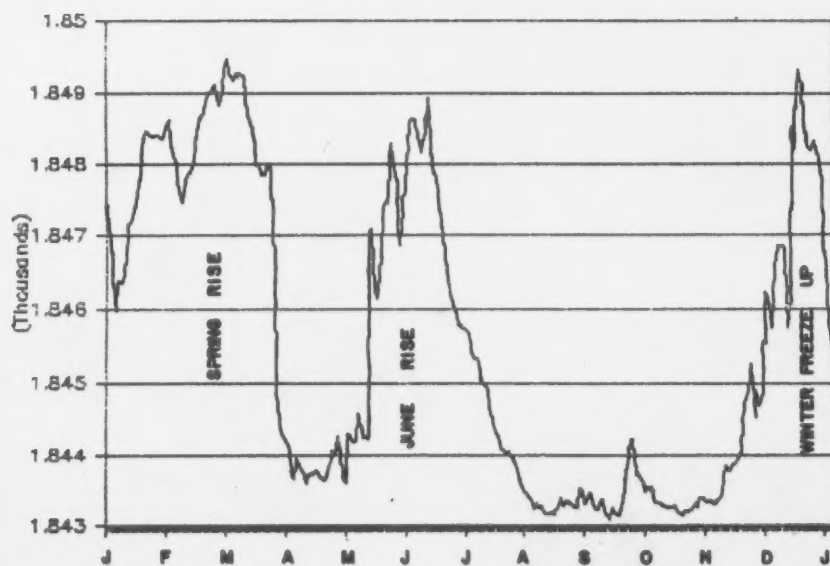
AT LEWIS & CLARK BRIDGE WILLISTON, N. DAK.



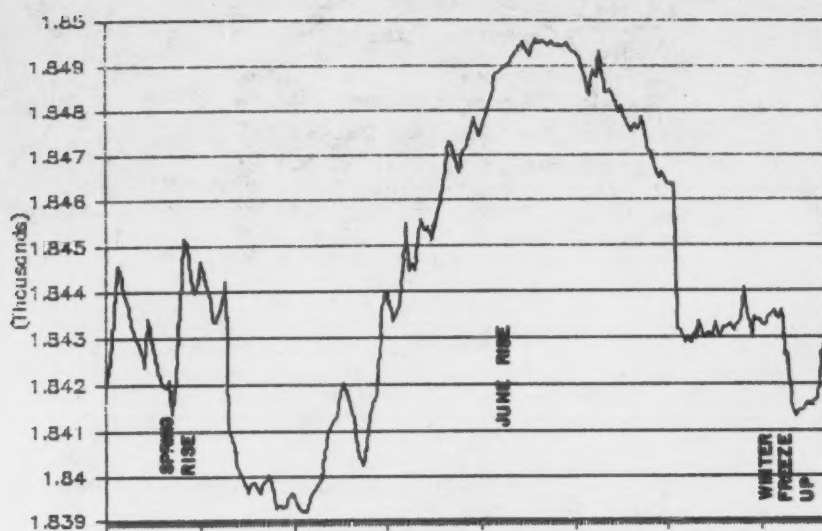
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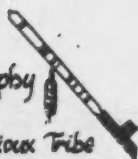


Charles W. Murphy

Chairman

Standing Rock Sioux Tribe

Fort Yates, North Dakota 58538



Statement of Charles W. Murphy
Chairman, Standing Rock Sioux Tribe
Before the U.S. Senate Energy and Natural Resources Committee
Water and Power Subcommittee Hearing
Bismarck, North Dakota October 9, 1989

Mr. Chairman and members of the Committee, I thank you for the opportunity to discuss the Pick-Sloan project's impact on the Standing Rock Indian Reservation and our people, and ways which the federal agencies that administer the project can and should be more accountable to the Standing Rock Sioux.

The Pick-Sloan Project, Indian Rights and the Federal Trust Responsibility to Indian Tribes

The Standing Rock Indian Reservation consists of 2.3 million acres, in North Dakota and South Dakota. Fifty-six thousand acres of what were overwhelmingly our best lands, were flooded by the Oahe Dam project. The dam and reservoir flooded 90% of our timber, our best wildlife habitat, and all of our indigenous food supplies. One third of our people were relocated against their will.

We recognize that many non-Indians were impacted by Pick-Sloan, as well. But Pick-Sloan is a multi-faceted project which benefits the general public in ways which do not spill-over onto the Indian Reservations. We believe that the U.S. Army Corps of Engineers' Master Plan needs revision, and that special consideration should be given in that process to ways that Pick-Sloan can benefit the Indian people.

Instead, the current administration of Pick-Sloan not only fails to respect the unique obligations of the federal government to Indian Tribes, it entirely disregards existing rights of the Tribes to the water and other resources of the Missouri River Basin. For example, our research discloses that the contracts between the Secretary of the Interior and the States of Montana, North Dakota and South Dakota for water marketing of up to 1 million acre-feet annually, are based upon surpluses of water in the Missouri River without consideration of the Tribes' rights.

The average annual water supply of the river at Sioux City, Iowa, is approximately 28 million acre-feet annually, in the absence of upstream depletions. Navigation downstream from Sioux City demands 14 to 15 million acre-feet annually, leaving approximately 13 million acre-feet for upstream consumption. As

of 1980, upstream consumption totaled 6 million acre-feet annually and the Secretary of the Interior has projected that over the next 50 years upstream depletion will total as much as 11 to 12 million acre-feet annually. Throughout this period of time, the Secretary determined that 1 million acre-feet were available for marketing to the states through secretarial contracts from Fort Peck, Garrison and Oahe.

The analyses by the Secretary (based in part upon mainstem regulation investigations by the Corps of Engineers) does not contemplate implementing the Tribes' rights to the use of water or acknowledge the reservation of those rights for future purposes, including irrigation, domestic, livestock, industrial, municipal, recreation, fish and wildlife and other beneficial purposes.

At Standing Rock, the Tribe has identified over three hundred thousand irrigable acres, with water requirements totaling over 1.3 million acre-feet annually. When the other 26 Tribes of the Missouri River Basin, from Omaha at the southern end to Blackfeet at the northern end, are considered, the Indian Winter's Doctrine rights to the use of water become a major consideration.

Among the Corps' so-called "project purposes," we find no consideration of Indian rights or the special contribution of the Tribes to the region. Time and again, we gave up land and resource rights, so federal or private development projects could proceed. Yet, for a variety of reasons we have not adequately benefitted. The Master Plan can and should be revised so as to include specific projects to utilize Pick-Sloan to benefit Indians. Examples of such programs include shoreline development and recreation, transfer of excess lands, protection of public water supplies through reservoir regulation, provision of adequate water for irrigation, cost sharing programs for new recreation development (not only for maintenance of existing Corps' recreation sites), historical/archaeological site development, and financing improvements of the hydropower generators to set aside a block of power for on-reservation industrial development.

Tribal Participation in Missouri River Basin Pick-Sloan Hydropower

One important resource resulting from Pick-Sloan remains the hydropower generated at the mainstem dams. Let me bring to the Committee's attention the interest of the Standing Rock Sioux Tribe in our "pumping" and "preference" entitlement to Missouri

River Basin Pick-Sloan hydropower. At present, almost all pumping and preference power is contracted by the Western Area Power Administration to municipalities, rural electric cooperatives, public utilities and private utilities. Indian Tribes' rights as preference entities have never been recognized in the power marketing framework. As the Western Area Power Administration proceeds with revising its criteria for recontracting in the year 2000, it is imperative that a substantive block of power be reserved for the Missouri River Basin Indian Tribes who have "preference customer" status, but who cannot successfully compete with the powerful electrical energy lobbies that now control the Basin's federal power allocations.

At Standing Rock, there are other unique considerations relating to Missouri River hydropower. Congress approved the Garrison Diversion Unit Commission recommendations with regard to Standing Rock, in the Garrison Diversion Unit Reformulation Act of 1986. The Commission recommended adoption of recommendations by the Joint Tribal Advisory Committee (JTAC), appointed by the Secretary of the Interior. The Committee found that Standing Rock had not been properly compensated for the taking of over 56,000 acres of the Tribe's bottomlands, for the Oahe Dam and Reservoir, an important component of the Missouri River Basin Pick-Sloan mainstem reservoir regulation program. The Committee found that "the Tribe is entitled to a sum in the range between \$181.2 million and \$349.9 million ... (for the) value of the economic base that was taken as the site for Lake Oahe." The North Dakota Congressional delegation has concurred with the Tribe that an appropriate source of revenue to provide the compensation so recommended is Missouri River Basin hydropower revenues.

Excess Taken Lands

The Tribe remains extremely concerned with the status of land taken for the Oahe Dam and Reservoir, but which has never been flooded. These lands have lay fallow and have been generally unused for the nearly 30 years since the United States acquired them for Pick-Sloan. The government guaranteed the Tribe, at that time, that lands acquired but not needed for the reservoir would be returned. Public Law 85-915, which authorized the land acquisition, conferred upon the Corps the discretion to return these lands. This discretion has not been exercised, despite the fact that these lands remain unused. There is no indication that the Corps plans to use them for any purpose in the foreseeable future.

The Corps has recently proposed to excess 386 acres of the over 18,000 acres which remain unflooded and unused. This proposal stems from the Corps' recent "Special Assessment of Project Land Adjacent to Standing Rock Indian Reservation." The Corps performed its "Special Assessment" at the request of Senator Quentin N. Burdick and the Tribe, during the November 19, 1987 hearing on JTAC before the Senate Select Committee on Indian Affairs. In the "Special Assessment," the Corps re-considered the amount of land needed from Standing Rock for Oahe, based on its current criteria for land acquisitions for reservoir projects. Essentially, the Corps concluded that if it were to construct Oahe today, it would need more of our land. This is curious indeed, as over 18,000 acres of taken land remains unused and lies fallow.

We believe that special consideration must be given to the fact that the lands are Indian lands, that they were acquired against our wishes and in violation of treaties, and with the understanding that land not flooded would be returned to the Tribe. The "Special Assessment" is devoid of such considerations, and is thus inherently flawed.

Nevertheless, the Corps found several small tracts, totalling 386 acres, which they proposed to excess. The Tribal Council has concluded that "a reasonable person could interpret (the Corps' proposal) as a ploy to avoid returning the true amount of land taken but not used for the Oahe Reservoir."

In its "Special Assessment", the Corps declared that the excess taken area is needed to mitigate the project's consequences on wildlife. The Tribe recognizes the merit in doing so. We have offered to not use the land, once returned, in a manner inconsistent with wildlife enhancement.

In fact, we have expressed to the Corps our commitment to improving access to the reservoir, improving recreational facilities, and managing and enhancing the wildlife resources in the taken area - land uses which the Corps itself considers important, but claims to have inadequate resources to accomplish. The Tribe remains committed to investing our resources in the taken area, to enhance its recreation potential and wildlife resources. Perhaps some of Congress' purposes in constructing Oahe could be best carried out by returning the land to the Tribe, rather than keeping it in the hands of a bureaucracy which has chosen to utilize its resources elsewhere.

We shall continue to work with the Corps to attempt to resolve this issue. However, recent developments underscore the need for Congressional intervention on the Tribe's behalf.

The Joint Tribal Advisory Committee recommended that these lands be declared excess and returned to trust status. Doing so would enable the Tribe to work with the U.S. Department of the Interior to improve access to the shoreline and develop those areas suitable for recreation. In addition, the federal oversight of trust lands will ensure that these lands will not be used in any manner inconsistent with Pick-Sloan project purposes.

Conclusion

In sum, the Standing Rock Sioux Tribe has contributed greatly to the welfare of the region at-large, by cooperating with the federal government and contributing our best lands for the Pick-Sloan project. Benefits which had been promised the Tribe have never been realized. Instead, the Corps' operation of Oahe Reservoir has resulted in incredible water depletions, and our irrigation system has been shut down and our public water system is threatened with a similar fate. Over 18,000 acres of our land remains with the Corps of Engineers, despite assurances that those lands acquired but not flooded would be returned. The recommendations of the Joint Tribal Advisory Committee (JTAC) for comprehensive legislation for Standing Rock participation in Pick-Sloan, have not as yet been heeded.

Nevertheless, we at Standing Rock look with hope toward the future. We believe that the increased scrutiny being given to Pick-Sloan and to the agencies responsible for its administration can only result in justice for our Tribe. We look forward to participating, in a very positive way, in efforts of the states and Tribes of the Missouri River Basin to ensure that the promises made to all residents of our region, Indian and non-Indian, are someday realized.

STATEMENT OF CHARLES W. MURPHY
CHAIRMAN, STANDING ROCK SIOUX TRIBE

MR. CHAIRMAN, WELCOME BACK TO NORTH DAKOTA, AND THANK YOU FOR THE COMMITTEE'S ATTENTION TO THESE ISSUES OF VITAL IMPORTANCE TO THE INDIAN PEOPLE AND ALL OF THE PEOPLE OF NORTH DAKOTA. WE SHALL SUBMIT WRITTEN TESTIMONY FOR THE RECORD, BUT I WOULD LIKE TO MAKE SOME BRIEF REMARKS HERE TODAY.

THE MISSOURI RIVER'S MAINSTEM DAMS HAVE HAD A MAJOR IMPACT ON THE QUALITY OF LIFE ON THE STANDING ROCK INDIAN RESERVATION. OF COURSE, THE DECREASING WATER LEVELS HAS ^{EXASPERATED} EXACERBATED THIS PROBLEM. THE PUBLIC WATER SYSTEM IN FORT YATES MAY BE FORCED TO SHUT DOWN, BECAUSE THE INTAKE IS THREATENED WITH EXPOSURE TO THE SURFACE. IT MAY BE CLOSE ENOUGH TO THE SURFACE THAT IT WILL FREEZE THIS WINTER. ALL OF THIS DESPITE THE FACT THAT THE FLOOD CONTROL ACT OF 1944 ITSELF SPELS OUT THAT THE PROVISION OF WATER FOR DOMESTIC USE SHALL BE, BY LAW, THE TOP PRIORITY FOR THE USE OF MISSOURI RIVER WATER.

IN ADDITION, THE IRRIGATION ~~SYSTEM~~ ^{AT OUR TRIBAL FARM} HAS ALREADY BEEN EXPOSED, AND OUR IRRIGATION PIVOTS HAVE BEEN SHUT DOWN. OUR TRIBAL FARM IS EXTREMELY IMPORTANT TO THE TRIBE. IT REMAINS OUR MOST PROFITABLE ENTERPRISE, AND HAS GENERATED CAPITAL FOR OTHER VENTURES. MEANWHILE, THE MUDFLATS BEING CREATED BY THE WATER DEPLETIONS CONSTITUTE A PUBLIC HEALTH THREAT, AND MAKE IT DIFFICULT FOR RANCHERS ON ADJACENT LANDS TO PROTECT THEIR CATTLE. IN SUM, OUR TRIBE HAS BEEN EXTREMELY SKEPTICAL ABOUT THE CORPS' PROMISES SINCE THEY CAME TO NORTH DAKOTA IN THE 1950's. UNFORTUNATELY, OUR PREDICTIONS ABOUT THEIR AFFECT ON THE STANDING ROCK SIOUX TRIBE AND ALL OF NORTH DAKOTA HAVE BEEN VINDICATED.

MR. CHAIRMAN, THERE IS ONE OTHER ISSUE RELATED TO PICK-SLOAN THAT I FEEL COMPELLED TO MENTION TODAY, AND IT IS ONE OVER WHICH THERE HAS BEEN CONSIDERABLE MISUNDERSTANDING. I AM REFERRING TO THE RETURN OF THE LANDS WHICH THE CORPS TOOK FROM OUR TRIBE FOR THE RESERVOIR PROJECT, BUT WHICH WERE NEVER FLOODED AND HAVE LAY FALLOW FOR OVER 25 YEARS. THE TRIBE SEEKS THE RETURN OF THESE LANDS, SO WE CAN BENEFIT FROM THE RECREATION DEVELOPMENT WHICH SO MANY OTHERS NOW ENJOY. THE TRIBE DOES NOT SEEK RETURN OF THE LANDS TO OBSTRUCT ANYONE'S ACCESS, BUT, TO THE CONTRARY, TO IMPROVE ACCESS AND RECREATION OPPORTUNITIES ALONG THE NORTHERN OAH. WE FEEL THAT THIS WILL BENEFIT EVERYONE, INDIAN AND NON-INDIAN, BUT THE CORPS INSISTS THAT THE LANDS WILL SOMEDAY BE USED FOR OTHER PROJECT PURPOSES. THERE HAS NEVER BEEN ANY EVIDENCE THAT THEY SHALL DO SO. WE ARE WILLING TO FURTHER DISCUSS THIS ISSUE, MR. CHAIRMAN, WITH YOURSELF, YOUR STAFF, AND THE PEOPLE OF THIS STATE, TO CLEAR UP WHAT HAS BEEN AN IMPORTANT MATTER FOR OUR TRIBE FOR MANY YEARS.

WITH THAT, I SHALL CLOSE MY REMARKS, AND ONCE AGAIN I THANK YOU FOR YOUR EFFORTS IN THIS AREA.



OAHU DAM CONCERNS

1. Erosion.
2. Mudflats.
3. Irrigation intake exposure (Eagle & Ft. Yates Units).
4. Unknown fish and wildlife impacts.
5. Discovery of human remains along shoreline.
6. Return of excess lands.
7. Shoreline reforestation.
8. Spawning station and fish hatchery.
9. Recreation development.
10. Hydropower benefits.
11. Taken area regulation and access.
12. Reserved sites for Tribal use.
13. Dead tree removal (specific sites for recreation use).
14. Solutions to current low reservoir water levels.
15. Process to mitigate impacts of low water levels.

TO: Subcommittee on Water and Power
Senate Committee on Energy and Natural Resources

Statement of Willard Burk, Secretary/Treasurer
Lewis and Clark Mutual Aid Corporation
prepared for delivery at:

Hearing on
Upper basin impacts on low water levels in
Missouri River Reservoirs
October 9, 1989
Pioneer Room of the State Capitol
Bismarck, North Dakota

My name is Willard Burk. I am a rancher in the Williston area and part of our operation is on Corps land, now administered by the North Dakota Game and First Department on what is called the Lewis and Clark bottom south of Williston. I am here today along with other members of the organization known as the Lewis and Clark Mutual Aid Corporation, which is an organization that succeeded the Lewis and Clark Irrigation District when the Lewis and Clark Project was purchased for the Garrison Project under an Act of Congress in the Public Works Appropriation Bill dated June 8, 1956.

One of the terms of this purchase was that "all of the landowners, on or before June 30, 1957 have offered to sell their property on terms agreeable to said landowners, and within the amount provided herein for such land acquisition." (Exhibit A) One of these terms was the reservation of all mineral rights - including the right of ingress and egress.

We realize this hearing is to address concerns relative to the low lake levels in the Garrison Reservoir. We feel that in order for the committee to properly address this

issue it is necessary to make the committee aware of what is transpiring at the upper end of the reservoir, as well as the more obvious low water level, which is affecting the sportsmen, resort owners and tourist business on the present lake.

We would like to address two points - present corps policy as it affects development on our mineral acres and the future of the upper end of the reservoir due to the wide fluctuation in the reservoir from a period of wet weather to periods of dry weather.

1. OIL DEVELOPMENT

Our families' minerals on the Lewis and Clark bottoms have been fully developed and it is difficult for me to express the frustration of those who have to cope with what seems to be a hopeless situation as far as development of their mineral acres.

The Corps states in their District Oil & Gas Policy that, "In the absence of a Subordination Agreement, the District cannot categorically deny reserved mineral development." (Exhibit B) However, in the same policy they require that a regulatory permit must be obtained for any construction work below the normal operating pool level. (Exhibit C)

We recently had a well drilling on the Lewis and Clark called the Mildred #1, drilled by John L. Cox of Midland, Texas. Cox originally made application to drill with drilling operation scheduled to begin December 15, 1987. This well was finally drilled in 1989 after over a year of attempts to get a permit. The Corps required John L. Cox to fill the drill site to a level above the operating pool level even though the reservoir was 20 feet lower at the time and scheduled to go lower. This fill and subsequent

removal cost John L. Cox approximately \$160,000. Needless to say this prohibitive cost has made leases on the Corps land - with the minerals reserved by the sellers - now of little value. We don't feel the Corps is treating these minerals properly and we have to address and correct this issue.

2. SILTING PROBLEMS

At the upper levels of the Garrison project we are experiencing a major silting problem due to silt deposits during the high water in the seventies and thereafter. The river is still in its banks at the Lewis and Clark Bridge, but, approximately one mile downstream it divided and much of it leaves the river bed and wanders off across the flats. We have a delta similar to the Mississippi Delta where the Mississippi joins the Gulf of Mexico. Whether this silt will flush out now with low lake levels or not, remains to be seen. This delta has created a mosquito problem for Williston, as well as raised concerns about high levels further upstream in the river. The water level at the Lewis and Clark Bridge is about 25 feet higher than the lake level, which is approximately 10 to 12 miles downstream at the present time.

Let's look at where we are 30+ years after the beginning of the Garrison Project. Garrison Diversion, which was one of the compensations North Dakota was to receive for the land lost to Garrison, has been scaled back and no real benefits have been received from Garrison Diversion. This is a bitter pill for us to swallow as Garrison Diversion was the lever that was used to convince us to sell our land for the Garrison Project. It might be well to reevaluate Garrison Diversion and revise the original Pick-Sloan concept of diversion in Montana and irrigate lands further west in Northeast Montana and Northwest North Dakota where we desperately need irrigation

water. It is entirely possible that with proper planning the area could be as productive as the South Platte Valley in Colorado.

I remember Congressman Usher Burdick stating in an assembly at our school back in the forties that the useful life of Garrison was approximately 100 years, then it would be full of silt - I don't know if this is still true or has been re-evaluated, but it should be addressed. If this is true 30% of the life of Garrison is now past.

The issue of the normal operating pool level should be addressed. A 30 foot fluctuation in the lake levels should be unacceptable to the people of North Dakota. A 1850 feet normal operating pool level may not be feasible, but Congress should mandate a minimum as well as a maximum level. The possibility exists that a regulatory dam on the Missouri in Montana should be constructed to maintain the heights on the mainstream reservoirs. This could be designated as a water level controlling reservoir and not as recreational so the water level could vary a great deal to store water during wet cycles for use during prolonged droughts. Montana could be compensated for this by irrigating lands in Northeast Montana as suggested earlier.

We thank the committee for the opportunity to express our concerns. We would gladly answer any questions the committee may have at the appropriate time or place.

Willard Burk
Secretary/Treasurer
Lewis and Clark Mutual Aid
Corporation

PUBLIC WORKS APPROPRIATIONS, 1957

25

This year the committee is proposing somewhat similar language which requires the agreement of 100 percent of the property owners, except for the heirs of a deceased landowner, and states the total amount to be paid under the amendment.

Accordingly the committee has included the following language in the bill:

: Provided further, That in lieu of protecting the Lewis and Clark Irrigation District, the sum of \$1,935,000 of the funds herein or hereafter appropriated for the Garrison Dam and Reservoir project on the Missouri River shall be available for the purchase of lands and improvements in the Lewis and Clark Irrigation District, and the sum of \$1,190,000 shall be available for the relocation of highways and utilities therein. The substitution of land acquisition for the protection shall be made and the Secretary of the Army shall acquire such land and improvements if all of the landowners, on or before June 30, 1967, have offered to sell their property on terms agreeable to said landowners, and within the amount provided herein for such land acquisition

Provided further, That in lieu of protecting the East Bottom of the Buford-Trenton Irrigation District, the sum of \$1,341,891 of the funds herein or hereafter appropriated for the Garrison Dam and Reservoir project on the Missouri River shall be available for the purchase of lands and improvements in and contiguous to the Buford-Trenton Irrigation District, and not to exceed \$2,000,000 shall be available to the Corps of Engineers for protection of the intake structure of the pumping plant in Zero Bottom and for the construction of bank protection to prevent erosion in the Missouri River adjacent to the Buford-Trenton irrigation project. The substitution of land acquisition for protection shall be made and the Secretary of the Army shall acquire such land and improvements if all of the landowners, except the heirs of Louis Morin, Jr., on or before June 30, 1967, have offered to sell their property on the terms agreeable to said landowners, and within the amount provided for such land acquisition: Provided, That the Chief of Engineers, United States Army, is authorized to acquire by condemnation proceedings, in the appropriate United States District Court, the public domain allotment of Louis Morin, Junior, now deceased, described as the west half southwest quarter, section 16, and the north half southeast quarter, section 17, township 163 north, range 103 west, 5th principal meridian, North Dakota, in connection with the construction and operation of the Garrison Dam and Reservoir: Provided further, That in the event land acquisition is undertaken in lieu of protection of the East Bottom, that in recognition of the increased per acre annual operation and maintenance cost of the remaining lands in the Buford-Trenton Irrigation District, the construction charge obligation assignable to the remaining lands of said district pursuant to the Act of October 14, 1940 (54 Stat. 1119), as amended, and the proposed contract between the United States and Buford-Trenton Irrigation District, approved as to form February 23, 1955, shall be non-reimbursable, and the Secretary of the Interior is authorized and directed to enter into a contract with the Buford-Trenton Irrigation District to transfer operation and maintenance responsibility for project works constructed by the Bureau of Reclamation for the benefit of the Buford-Trenton Irrigation District to such district

THE DALLES DAM, OREG. AND WASH.

The committee, after hearing the witnesses representing the Nez Perce Indian Tribe and the Corps of Engineers, believes that a settlement between the Nez Perce Indian Tribe and the United States is within the realm of negotiation. Accordingly, the committee is hopeful that a prompt and equitable settlement can be reached and thereby obviate the necessity of lengthy and costly litigation in the courts.

LOWER COLUMBIA RIVER FISH SANCTUARY PROGRAM

During the testimony on the lower Columbia River fish sanctuary program, representatives of the Fish and Wildlife Service testified that there was a need for initial planning and programming of measures to maintain the salmon and sport fishery in Idaho which would be

DM 1130-2-5

APP C

Change 1

15 Mar 89

Garrison. When a proposal is received, acquisition data must be evaluated to determine if a Subordination Agreement exists which could preclude mineral development.) This obligation is a result of the law's treatment of the mineral interest as the dominant estate and the surface of the land as being subservient to the mineral holder's right to use it.

b. District Responsibilities. Unlike the situation described in paragraph 4, BLM does not have regulatory jurisdiction because the Federal Government does not own the minerals. A state agency (example: North Dakota Industrial Commission) will have regulatory responsibility for monitoring drilling activity and procedures. The mineral owner and/or his operator must coordinate with the District to use the federally-controlled surface. As described in paragraph 5a, the mineral owner's "right" to use the surface already exists. The District, however, is responsible for protection of Government interests in the use of surface and near-surface lands and waters. The District will protect these interests with stipulations incorporated into a Letter Grant which serves as the permitting instrument. Stipulations may not make an otherwise economical project uneconomical. In the absence of a Subordination Agreement, the District cannot categorically deny reserved mineral development. However, a project can be denied if it conflicts with Federal statutory requirements (e.g., The National Historic Preservation Act, 16 U.S.C. 470 et. seq.; The Endangered Species Act, 16 U.S.C. 1531 et seq.; or The Clean Water Act, 33 U.S.C. 1251 et. seq.)

c. Surface Availability/Application Package.

(1) Preliminary Contact. Inquiries concerning surface availability will be directed to CEMRO-RE-FO. CEMRO-RE-FO will notify CEMRO-OP-IM that a new well location is being considered, as well as request the proponent contact the Lake Manager prior to entering Government land for survey purposes. CEMRO-RE-FO will provide the following information to the proponent:

(a) A letter detailing information to be included in the application package.

(b) Contacts to be made in scheduling a predrill on-site and the requirement to prepare a site reclamation plan for discussion at the onsite.

(c) "Guidelines for Preparing a Surface Use Program," as taken from Onshore Oil and Gas Order No. 1.

(d) Appropriate offices to receive a copy of the application package: CEMRO-RE-FO and CEMRO-RE-M.

(e) If a bottomland location is proposed, an outline of the District's diking policy (see 5g(10)(k)) will be provided to the proponent.

Exhibit C

DM 1130-2-5

APP C

Change 1

15 Mar 89

- (g) The pit will be fenced and flagged on three sides during drilling. A good three strand wire fence is the minimum required. Upon drilling completion, the fourth side will be fenced and remain so until reclaimed.

(h) The liner and all fluids and deposits in the reserve pit will be removed from bottomland locations by 1 March if CEMRO-OP-LM feels a location is subject to spring flooding.

(i) All sewage will be collected in chemical toilets and removed from Government land.

(j) Absolutely no garbage will be placed in the reserve pit. Trash will be placed in appropriate containers or trash/burn pits. All unburned trash will be removed from Government land upon completion of drilling. Pits will be covered with wire mesh at all times while in use. Pits will be backfilled upon completion of drilling.

(5) Well Site Locations. As discussed in 5a and 5b above, the Corps has limited discretion in precluding development of reserved minerals. However, since some lands have a greater resource value, and since it is possible to move well locations (within restrictions imposed by petroleum reservoir geology and state spacing requirements), or directionally drill from adjacent lands, certain areas should be avoided, if possible. If an impasse is reached on the location of a site, it will be necessary to evaluate the District's position in light of statutory authority and legal precedent. It is incumbent upon field and District personnel to be flexible and innovative in discovering and presenting acceptable alternatives to unsuitable locations. The following list, while not all-inclusive, describes areas in which drilling should be discouraged or avoided, if possible.

(a) Any elevation below the normal operating pool of the reservoir or below the high water line of river channels. Regulatory permits must be obtained for any construction work below these elevations.

(b) Below dam tail water elevations for full powerhouse discharge under ice-affected conditions.

(c) Wetlands (as determined by CEMRO-OP-R).

(d) High Intensity Recreation Areas, Project Operations Areas, and Natural Areas, as defined by the Project Master Plan.

(e) Within 2,000 feet of a major structure or 500 feet of a minor structure (as defined by CEMRO-OP-M).

(f) In areas that disturb the habitat of a threatened or endangered (state or federally listed) plant or animal species.



October 3, 1989

Slater's RESORT

SUBCOMMITTEE ON WATER AND POWER
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

LITTLE MISSOURI BAY
LAKE SAKAKAWEA

We are Mark and Rachel Slater, owners and operators of Slater's Resort, a private resort business on Lake Sakakawea. We have invested in the recreation industry on Lake Sakakawea, and this industry is now very much in jeopardy because of the low water levels resulting from the policies of the Corps of Engineers. We feel it will be a tremendous blow to tourism and to the economy of North Dakota if something isn't done to reverse this situation.

Slater's Resort is located at the Little Missouri Public Recreation Area in the Little Missouri Arm of the lake. We have a direct lease with the Corps of Engineers for this recreation area, which is the only major public access to the lake for all of Southwest North Dakota. There was a \$5 million paved road just completed with federal and county taxpayers' dollars to serve this recreation area because of the heavy use and demand by the public.

Our resort business has been totally devastated by the release of water out of Lake Sakakawea. We experienced a serious loss of revenue this summer because of undesirable boating conditions. There was only a few feet of water on our temporary ramp through July and in August access was lost to the lake altogether. Based on projections for the water levels next year by the Corps of Engineers, there will be no water near our resort and no chance of access, and so we will be forced to close until the water comes back, if we can last until then.

Obviously this is a terrible crisis for us. Through no fault of our own, we are faced with losing everything we have worked for because of the lack of water, due to the Corps' policy to release the water downstream for other commitments. We must have a reexamination of this policy if the recreation industry on Lake Sakakawea is to survive.

We urge that the policy that covers the Missouri River System be evaluated and adjusted for the changing uses of the water project. A more balanced system must be put in place that recognizes all the industries using the system fairly, especially when conditions warrant a change in water levels. We know that it is a big picture with a lot of competing interests and concerns, but certainly since the policy was written there has been many changes in the project uses, and the Corps must be made more responsive to the needs of all the users. North Dakota citizens have a right to the water for recreational uses, and right now those rights are last on the list. We turn to our representation in Washington to protect our rights to our water and correct the inadequacies of the current policy for the Missouri River System. We ask for your leadership to find a workable solution for all the recreational interests on Lake Sakakawea.

Thank you.

Mark & Rachel Slater
Mark and Rachel Slater

MARK & RACHEL SLATER

P.O. BOX 35 • DUNN CENTER, ND 58221 • 701-839-3363



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
215 NORTH 17TH STREET
OMAHA, NEBRASKA 68102-4978

September 21, 1989

REPLY TO
ATTENTION OF

Natural Resources Management Branch
Operations Division

Mr. & Mrs. Mark Slater
Slater's Resort
P.O. Box 35
Dunn Center, North Dakota 58626

Dear Mr. & Mrs. Slater:

I have your August 30, 1989, letter inquiring about Omaha District's plans for the Little Missouri Bay Recreation Area (LMBRA). I understand and appreciate the problems you have encountered by the low Lake Sakakawea levels in 1988 and 1989. However, our projections indicate that next spring there may be no water in the immediate vicinity of the LMBRA other than the river flows.

Mr. Bob Kindrick, my Lake Sakakawea Manager, has investigated alternative boat ramp sites near the LMBRA, but soundings indicate none of them have adequate water depth. There is a site further downstream with suitable water for launching, but it has no access. Development of this access is prohibitive due to topography, steep cut banks, length of road required (about 4 miles), and acquisition of road easements.

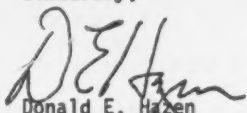
We have also considered other areas for a low-water boat ramp to accommodate the current users of the Little Missouri Recreation Area: Charging Eagle Bay and Red Butte Bay. There is no public access to either of these areas. The next closest area with lake access is Beaver Creek Bay 50 miles away. It is currently leased to and managed by the Zap and Golden Valley Park Boards.

The Corps of Engineers has no authority to assume responsibility for relocating your facilities to a new area. In addition, the terms and conditions of Lease No. DACW45-1-67-5187 prohibit us from subsidizing or purchasing your business. Condition Number 20 of your lease states that the lessee shall have no claim for damages of any character because of flooding or draw down of the reservoir or pool.

Should the Corps have to assume management of the area, closure is a possibility. This national policy reflects current federal manpower and funding limitations. Prior to any decision on closing, the Omaha District will investigate all possible impacts and explore the varied options available to us.

While we are committed to maintaining some lake accesses at Lake Sakakawea, maintaining one at LMBRA is not considered feasible at this time. If you have any further questions, feel free to contact Bob Kindrick, Lake Manager, at (701) 654-7411.

Sincerely,

A handwritten signature in dark ink, appearing to read "DE Hazen", is written over the typed name.

Donald E. Hazen
Colonel, Corps of Engineers
District Engineer

William R. Mills 9 Oct 89

If the reservoirs were at a normal level, the water would be going through the electrical generation turbines with more force. With the reservoirs low, the power being generated is measurably less.

The power that is being generated is given to the power companies at a price greatly below its value. Producing this power with fossil fuel costs many more dollars.

The water is released from the Missouri River system of dams so that there will be a navigation channel three hundred feet wide and nine foot deep in Kansas and Missouri. This permits barge traffic there. Because of this water transportation competition, rail and truck rates are down for those lower states.

The dams eliminated commercial barge traffic for the Dakotas so the loss of transportation competition in the Dakotas has the opposite effect.

When there is not sufficient water from the drainage area below the Dakotas to maintain their channel, the Dakota lakes on the Missouri are drained. This is what has happened over the past two years.

The thirteen year annual average computed in 1982 was 18,550,000 acre feet. In 1983 there was an inflow of 16,569,909 acre feet. The water level in Garrison Reservoir was maintained between a low of 1839.5 and a high of 1846.53 and over 10 of the 12 months the level was above 1840.

The inflow during the past 12 months was 12,746,000 or 76% of 1983 and 68.7% of the long term average.

The "drouth" problem was in the drainage area below the Dakotas. During those intermittent water shortages, the channel was supplemented by the Dakota lakes.

When the Department of Energy does not have enough power produced from the dams, it buys the power it gives to the utility companies. At present, the Department of Energy is buying one billion kilowatt hours from private power producers to give to power distributors.

The result is an enormous expense to the taxpayers, and a further depletion of fossil fuels, a non-replaceable energy source. We have more air pollution and environmental damage. The Missouri River lakes shrink and the shore of mud grows. The Dakota tourist industry suffers and the economy is hurt, businesses close, employment lessens.

The blame is placed on the drouth. It is said there isn't much water. Wouldn't it be wiser to use the water more carefully if it is in short supply?

If the reservoirs were kept at their normal operating level and that water flowing in was released, but no more, the additional drop (head) would produce more power and the lakes would remain beautiful. The tourist industry in the Dakotas would not have an adverse impact at a time the drouth was already hurting the Dakotas.

The production would lessen the amount of power that must be purchased by the Department of Energy to maintain the subsidies to the utilities companies until its current promises expire.

If the 1989 inflow was released from a lake at an 1840 elevation instead of 1820, there would be 94,500,000 KWH saved. Considering the fact that in 1988 WAPA purchased 7,128,000,000 KWH for a price of \$170,000,000, the monitoring of Garrison Dam alone would save WAPA \$2,249,000 at the purchase price of .0238496.

WAPA provided power to investor owned utilities of 3,969,695,000 KWH and received \$72,521,452 at a selling price of .0182686 or about 77 cents on the dollar of what WAPA paid to purchase power. It was a discount off cost of 23.4% or \$18,078,925.

Draining the lakes and wasting the water is not dictated by the economics of power production.

The lakes are drained to produce navigation in the lower states.

Norton, Kansas, as an example, has low rail rates because of the competition potential in barge traffic. Norton, Kansas, can send wheat by rail 717 miles to St. Louis for 61 cents a bushel. Minot, North Dakota, sends wheat to Minneapolis less than half that distance, 337 miles, for 74 cents a bushel.

Norton, Kansas, can send wheat by rail 1870 miles to Portland, Oregon, a west coast port, for 94 cents a bushel. Minot can send wheat only 1327 miles to Portland, but at a cost of \$1.14 a bushel.

In the past it was contended this differential was because there was a backhaul in Kansas which ships things in. However, this contention was dispelled recently when the absence of Dakota water grounded the barges and for a short period, until they began draining the Dakota lakes, Norton wheat cost more to ship than North Dakota wheat.

North Dakota is caught in a power squeeze. It is not hydro power or thermal power. It is political power.

William R. Mills
2904 Langer Lane
Bismarck, ND 58504

10-12-1989

FROM: TED'S MINNOWS, INC.
POST OFFICE BOX 343
LINTON, ND. DAK. 58552

TO: COMMITTEE ON ENERGY AND NATURAL RESOURCES
U.S. SENATE
364 DIRKSEN BUILDING
WASHINGTON D C 20510

ATT: MR. THOMES JENSON

AS A CONCERNED CITIZEN OF THE UNITED STATES AND A PROPERTY OWNER IN THE STATE OF NORTH DAKOTA, I WOULD LIKE TO POINT OUT THE DISASTROUS ECONOMICAL AND ECOLOGICAL EFFECT CAUSED BY THE MISMANAGEMENT OR FAILURE TO CONTROL THE VALUABLE WATER RESOURCES IN THE MISSOURI RIVER OVER THE PAST TWO YEARS.

THE WATER RESOURCES ALONG THE MISSOURI RIVER BASIN, BEGINNING WITH GARRISON DAM, SOUTH THROUGH THE DAME DAM RESERVOIR HAS BEEN LOWERED TO THE POINT WHERE IT HAS GREATLY JEOPARDIZED THE ECONOMY OF NORTH AND SOUTH DAKOTA AND DAMAGED THE STATES NATURAL RESOURCES WHICH WERE CREATED BY THE CONSTRUCTION OF THESE DAM'S; FARM IRRIGATION, FISH REPRODUCTION, WILD LIFE REFUGES AND A TOURIST INDUSTRY WHICH HAD BEEN ESTABLISHED ALONG THE MISSOURI RIVER BASIN.

RECOGNIZING THAT THE DROUGHT OF 1987, 1988 AND 1989 HAD AN EFFECT ON THE TOTAL GALLONS OF WATER FLOW TO DOWN STREAM RESIDENCE, THIS DOES NOT JUSTIFY DEVASTATING ONE PART OF THE COUNTRY TO SAVE ONE INDUSTRY IN ANOTHER PART OF THE COUNTRY. THIS PHILOSOPHY OR POLICY HAS BEEN DIFFICULT TO UNDERSTAND. WATER IS A PRECIOUS RESOURCE AND MUST BE CLOSELY MANAGED AND SHARED BY ALL.

IF THE DAMS UP STREAM HAD NOT BEEN CONSTRUCTED, THE PROBLEMS DOWN STREAM WOULD HAVE BEEN MUCH WORSE. A SOLUTION TO THE PROBLEMS DOWN STREAM, IN REGARD TO THE MISSISSIPPI RIVER BARGE CHANNELS AND WHAT EVER OTHER PROBLEMS THERE MAY BE, SHOULD BE STUDIED AND CORRECTIVE ACTION TAKEN.

THE UP FRONT VISIBLE AFFECTS OF LOWERING THE WATER LEVEL TO THE PRESENT LEVEL, DURING 1989 ARE AS FOLLOWS:

1. THE RICH GAME FISH SPAWNING GROUNDS AND THERE NATURAL FOOD SUPPLY HAS BEEN REDUCED OR ELIMINATED IN SOME AREAS OF THE MISSOURI RIVER BASIN, JUST AS GAME FISHING IN THE STATE OF NORTH DAKOTA HAD ACHIEVED RECOGNITION AS THE PLACE TO CATCH THE BIG ONE.

THE WATER LEVEL HAS BEEN LOWERED TO THE POINT WHERE IT HAS RECEDED BACK INTO THE MISSOURI RIVER CHANNEL. THIS REDUCES THE GAME FISH REPRODUCTION CYCLE AND AFTER THAT CYCLE HAS BEEN BROKEN IT WILL TAKE YEARS TO RECOVER.

2. FARMERS EXPENDED LARGE PORTIONS OF THEIR EARNINGS TO INSTALL IRRIGATION EQUIPMENT TO PROTECT OR REDUCE THE EFFECTS OF A DROUGHT. A LARGE PORTION OF THIS EQUIPMENT IS IDLE DO TO THE LOW WATER LEVEL, AND CROPS HAVE BEEN LESS PRODUCTIVE.

3. LAND INVESTMENTS HAVE DROPPED TO AN ALL TIME LOW ALONG THE MISSOURI RIVER BASIN, LEAVING SUMMER HOMES VACANT ON THE PICTURESQUE MISSOURI RIVER.

4. BEAUTIFUL RECREATIONAL PARKS HAVE BEEN BUILT TO SUPPORT A FISHING AND TOURIST INDUSTRY. BOAT RAMPS AND DOCKS ARE HIGH AND DRY; AND CAMP SITES ARE EMPTY. A CONTRACTOR WAS ON SITE AT BEAVER BAY TO COLLECT FEES, IF A CAMPER BY CHANCE MIGHT DROP IN. A CONTRACTOR ALSO CUTS THE GRASS AND COLLECTS THE GARBAGE, IF THERE IS ANY; AND THE WASH ROOMS ARE CLEANED THAT NO ONE USES. THE WRITER HAD ONLY SEEN TWO CAMPER TRAILER SITES UTILIZED AT THE BEAVER BAY RECREATIONAL PARK, OVER THE NORTH DAKOTA CENTENNIAL, FOURTH OF JULY WEEK END. THIS RECREATIONAL FACILITY HAS OVER 60 HARD CAMP SITE PADS AND OVER 300 ACRES OF WATER FRONT.

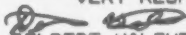
5. BAIT AND TACKLE SHOPS THAT HAD BEEN ESTABLISHED ON THE LAKE HAD TO BE CLOSED, BECAUSE OF THE LOW WATER LEVEL BOATS COULD NOT BE LAUNCHED AND FISHING HAS COME TO A STAND STILL ON THE LAKE.

6. RESIDENTS HAVE PURCHASED BOATS, PONTOONS, RECREATIONAL VEHICLES, AND EQUIPMENT FOR USE ON THE LAKE, WHICH IS NOW SITTING IDLE OR FOR SALE, AND DETERIORATING, BECAUSE THERE IS NO PLACE TO USE IT.

7. THE RECREATIONAL INDUSTRY AND THE STATE OF NORTH DAKOTA HAS LOST MILLIONS OF DOLLARS IN REVENUE, JOBS, AND IN SOME CASES THE LIVELIHOOD OF LOCAL RESIDENTS, LEAVING THEM NO CHOICE BUT TO MOVE. IF THIS TREND CONTINUES, THE WATER LEVEL CAN GET TO A POINT WHERE IT CAN EFFECT THE POWER OUTPUT OF THE HYDRO ELECTRIC GENERATORS. THE DAMS WHICH NOW PRODUCE CLEAN ELECTRICAL POWER COULD COME TO A STAND STILL. MEANING THAT POWER NOW BEING GENERATED BY THESE DAMS, WOULD HAVE TO BE PRODUCED BY OTHER POLLUTANT MEANS; GAS, OIL, COAL ETC.

THIS WRITER RECOMMENDS THAT A COMMISSION OR WORKING PANEL BE APPOINTED TO STUDY THE ECONOMICAL AND ECOLOGICAL IMPACT CREATED BY NOT PROPERLY REGULATING THE WATER RESOURCES AND ESTABLISHING A MINIMUM LOW WATER LEVEL AT THE DAMS AND AT THAT POINT CONTROL IT AS A GALLON IN AND A GALLON OUT. THIS TYPE OF CONTROL WOULD SERVE EVERYONE'S INTEREST. THE FISH COULD FLOURISH, THE FARMERS COULD IRRIGATE THEIR CROPS, FLOODING AND DOWN STREAM WATER NEEDS COULD BE MANAGED, THE INDUSTRY WOULD GAIN SOME STABILITY, AND PLENTY OF WATER WOULD BE AVAILABLE TO PRODUCE CLEAN ELECTRICAL POWER. SERVING ALL THE PEOPLE.

VERY RESP


DELBERT WALTHER PRESIDENT

Sub-Committee on Water and Power of the
Senate Committee on Energy and Natural Resources

RE: Corps of Engineers Management of Missouri River
System.

Senators:

I live on a family farm 18 miles North-
west of Linton, N. Dak. on Lake Oake.
In 1881 my great-great grand parents settled
here so I am the 5th generation to operate
this farm.

In the early 1960's the Corps of Engineers
took 746 acres of prime bottom land, which
included most of the original homestead,
from my father and mother for the Oake Reservoir.

In the 1970's after I had taken over
operation of the farm I started irrigating
using Lake Oake as the water source.
1989 is the third year in the 1980's that
the water level has dropped to the point
that we could not pump water. When the
water recedes into the old Missouri River
channel it is over 3000 feet to the water.
Mud flats are left between the water and
our normal pumpsite and trying to put a
pump at the waters edge, laying the pipe
3000 feet and transporting fuel to the new
pumpsite is futile because of the soft
lake bottom.

If irrigation is only second in priority
~~only~~ to flood control, I fail to see how
the Corps of Engineers can justly lower
the lake levels as low as they do.

I am including some pictures to illustrate the situation. All pictures were taken from approximately the same vantage point over looking the Missouri Valley and are numbered on the backs.

Picture number one shows how it was before the land was taken and flooded (1960).

Picture number two shows how the reservoir looks when it has plenty of water.

Picture number three was taken in 1988. It shows how the receding water leaves only sloughs and mud flats.

Picture number four was taken in September 1989 and shows no lake water and only the Missouri River channel on the opposite side. In the center of this picture some run off water can be seen keeping the bottom soft and impossible to travel on.

If irrigation is second only to flood control the Corps of Engineers need to raise the minimum operating pool level to approximately 1597' above mean sea level on Lake Oahe.

I know there are other farmers in the same situation.

Thank you for your consideration of this problem.

Sincerely

Glenn McCrory
Box 322
Linton, N. Dak 58552

Sub-Committee on Water and Power of the
Senate Committee on Energy and Natural Resources

Senators:

I would like to thank you for providing the opportunity to testify on matters concerning the Corps of Engineers management of the Missouri River System and how it effects the communities and individuals in our area.

It is obvious that releases from the upstream reservoirs are being managed to benefit downstream interests at the expense of the people of the upstream states. The releases in 1988 and 1989 have drained the Oahe Reservoir to the point where there practically none left in Emmons County, North Dakota.

Recreation and all its benefits to the local economy has been reduced dramatically with most of the boat ramps unusable.

Farmers in Emmons County have over 5000 acres of land under sprinkler irrigation using Lake Oahe as the water source. They are left wondering how they can possibly maintain their investments and in some cases financially survive if these conditions persist.

In my opinion the only way for the Corps of Engineers to remedy this problem is to

raise the minimum operating pool level from 1540' MSL to 1597' MSL. This change in operating procedure would help provide the people of Emmons County with benefits they paid so dearly for with the loss of land to Lake Oake Project.

A big help to the recreation industry would be the impoundment of water behind the road embankment across Beaver Bay west of Linton, North Dakota. I think that proposal needs to be considered very seriously.

Thank you again for the opportunity to comment. I hope you can help remedy the situation.

Sincerely

Glenn McChory

Chairman

Emmons County Water Resources Board

Box 322

Linton, North Dakota 58552

Committee on Energy and Natural Resources
Subcommittee on Water and Power

Hearing on
Upper basin impacts of low water levels in
Missouri River Reservoirs

October 9, 1989
9:30 - 12:30 p.m.
Pioneer Room of the State Capitol
Bismarck, North Dakota

Written Testimony of Stephen Hoetzer, P.E.

My name is Stephen Hoetzer, P.E. and I am the owner of American Engineering in Bismarck, North Dakota. Our firm specializes in planning, design and construction of water resource facilities. I have worked in the water resource field for 19 years. I also own a cabin on Lake Sakakawea and a large sail boat. Our family spends most of each summer at Lake Sakakawea and we live close to the River in Bismarck.

As the Governor has said previously, the Corps management of the Missouri River System and Lake Sakakawea borders on irresponsibility. The Corps had predicted lake levels 10 to 15 feet higher than they reached in 1988 and 1989 and have given the State and recreation public misleading and false information. Yes, false information. Their computer predictions are based on historical records and not the conditions that exist in the Missouri Basin watershed at the time predictions are made. The Corps plays the odds like a "river boat gambler". Their attitude is that we will not have two low flow years back to back and there will never be three consecutive years of low flow. The Corps

is gambling with the livelihoods of many people as well as the recreation opportunities of North Dakota citizens.

The Corps promised a number of North Dakota citizens last year in Washington D.C. that they, The Corps, would spend \$1.75 million in the spring of 1989 to insure that we the public, would have access to the lake. They spent approximately \$250,000 on access improvements much less than promised. Many large boat owners could not or did not launch their large boats in 1989. I did not launch my sail boat because of poor ramp access. There was not enough water over the ramps until after July 4, 1989 to launch large sail boats and the water dropped to a point where the boats would have to have been pulled by August 12, a one month season hardly worth the effort and expense.

In addition, 17 of the 21 cabins in Pick City Cabin Area #2 are out of water. The Lake has dropped to a level where no one can afford to chase the lake water. The ground water is so poor that it is not worth the expense of drilling a well. The Corps has little sympathy for resort and cabin owners around the lake. The Corps does, however, care about navigation and the boating public on the Missouri River below Gavins Point Dam and around Omaha. The Corps makes the following statements about use of the open river below Gavins Point Dam in their September 1, 1989 memo which is attached:

- 1) Option 3 - "would delay the inputting of boats into the marinas until the (navigation) season opens. Recreation use is relatively limited however during the early season."
- 2) Option 5 - "the impact would be much greater. Prior to the reduced flow period, all boats (approximately 1200 to 1400) would have to be removed from their boat slips from marinas. All marinas are between Sioux City and Omaha. Many of these crafts are large boats and would not be returned until next year. Dodge Park in North Omaha commonly places a plug in the entrance to maintain a higher water level during the winter months. Numerous large boats remain in the marina. Significant notice would have to be given to permit the needed removal of boats."

These types of impacts were not discussed with North Dakota, South Dakota, or Montana when our reservoir was drained and our boats were left high and dry.

In order to preserve some of the values the Main Stem Reservoirs, I would like to propose the following operating plan to the Corps for 1990: the flows in the Missouri River be limited to a maximum of 25,000 cfs below the dam at Gavins Point, the navigation season not open until May 1, 1990 and the navigation season close on October 1, 1990 unless the

following conditions are met:

- 1) The inflow at the confluence of the Yellowstone and Missouri Rivers is projected to exceed 16,000,000 acre-feet during calendar year 1990.
- 2) The storage in Lake Sakakawea is projected to increase by 4,000,000 acre-feet by July 1, 1990.
(lake level from 1815 msl to 1830 msl)
- 3) The pool elevation of the six main stem reservoir are at or projected to be above the following elevations by May 31, 1990.

a)	Fort Peck	2220 msl
b)	Lake Sakakawea	1820 msl
c)	Lake Oahe	1590 msl
d)	Big Bend	1420 msl
e)	Ft. Randall	1350 msl
f)	Gavins Point	1206 msl

In closing, I hope the Corps looks at this as an opportunity to improve access to reservoirs in North Dakota, South Dakota, and Montana and provides the States with enough money to make major improvements. To provide adequate access to Lakes Oahe and Sakakawea in North Dakota would take between \$3.2 and \$4 million.

Thank you for taking your time to consider my comments.



DEPARTMENT OF THE ARMY
MISSOURI RIVER DIVISION, CORPS OF ENGINEERS
P.O. BOX 103, DOWNTOWN STATION
OMAHA, NEBRASKA 68101-0103

REPLY TO
ATTENTION OF

September 6, 1989

TO ALL NAVIGATION INTERESTS

The drought continues, and judicious use of the remaining water in the Missouri River main stem reservoirs is dictated. I seek your comments on a possible alteration to the plan for the balance of this year's navigation season.

My plan at the beginning of this year's season was to provide a navigation season shortened by approximately 4 weeks with a flow target reduction of 3,000 cubic feet per second (cfs) below full service and a 1-week delay in the opening of the 1990 season, consistent with the provisions of the Missouri River Main Stem Reservoir System Master Manual. Due to the persistent drought, main stem reservoir storage is now at record low levels. Our annual runoff forecast has been reduced from 22 million acre-feet (MAF) in early June to 19 MAF because of continued drought. The average annual runoff is 25 MAF. Because inflow has continued to be less than expected, the current reservoir storage is less than we forecast at the Missouri River water control public meeting in Pierre, South Dakota, last spring. The water conservation measures that I discussed with you earlier this year are still necessary. In addition, further water conservation is appropriate.

The planned 1989 system releases were intended to provide a flow at downstream locations 3,000 cfs less than full service. These targeted flows were restricted by potential impact on nesting interior least terns and piping plovers as tributary flows fell below anticipated levels. The table below summarizes full service, minimum service, 1989 planned flows and actual 1989 minimum sustained navigation flows. Proposed flow targets for the remainder of the 1989 navigation season are also presented.

Location	Service Level (cfs)		1989 Target	1989 Actual	1989 Rev. Tgt
	Full	Minimum			
Sioux City, IA	31,000	25,000	28,000	31,000	26,000
Omaha, NE	31,000	25,000	28,000	32,000	26,000
Nebraska City, NE	37,000	31,000	34,000	34,000	32,000
Kansas City, MO	41,000	35,000	38,000	36,000	36,000

Recorded flows were less than the 1989 targets for about 1.5 weeks in June, intermittent periods in July, and the first 3 weeks in August. These recorded flows were commonly 5,000 cfs less than full service flows and were as much as 6,000 cfs below full service for short periods. I am aware that some navigation problems were experienced.

-2-

However, additional water conservation measures must be considered. Therefore, on the basis of the experience gained this year, I am proposing that the flow targets for the balance of the 1989 season be 5,000 cfs below full service.

I welcome your comments on my proposed reduction in target flows for the remainder of the 1989 season. Please provide your comments by September 13 by FAX (402-221-7379) or by letter to the following address:

Mr. Duane Sveum
U.S. Army Corps of Engineers
P.O. Box 103, DTS
Omaha, Nebraska 68101-0103

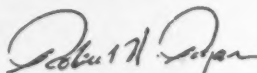
Flow support for the 1989 season will end on November 1, 1989, at the mouth of the Missouri River near St. Louis, Missouri. This is 30 days earlier than the usual conclusion of the Missouri River navigation season. To meet this schedule, system releases from the Missouri River main stem reservoirs in support of navigation will be reduced as follows:

END OF FLOW SUPPORT
FOR THE 1989 SEASON

Sioux City, IA	October 23
Omaha, NE	October 25
Nebraska City, NE	October 26
Kansas City, MO	October 28
Mouth near St. Louis, MO	November 1

Navigation interests should use the above dates to plan their activities for the remainder of this year's season.

A public meeting will be held on October 19, 1989, at the Peter Kiewit Conference Center, 14th and Farnam in Omaha, Nebraska. We will explain the regulation of the reservoirs during the 1989 drought. A draft operating plan will be presented for the main stem reservoir regulation for the entire year of 1990. This plan will include possible alternatives for support of flows for the 1990 navigation season for an average runoff and above and below normal runoff scenarios. I invite you to attend this important public meeting to provide input on how we can best serve the needs of all project purposes.



Robert H. Ryan
Brigadier General, U.S. Army
Division Engineer



DEPARTMENT OF THE ARMY
MISSOURI RIVER DIVISION CORPS OF ENGINEERS
P O BOX 103 DOWNTOWN STATION
OMAHA, NEBRASKA 68101-0103

REPLY TO
ATTENTION OF

September 1, 1989

Planning Division

Honorable George A. Sinner
Governor of North Dakota
Bismarck, North Dakota 58505

Dear Governor Sinner:

Thank you for your participation in a special session of the Upper Missouri River Basin Governors' Association on August 21, 1989, to discuss the regulation of the Missouri River Main Stem Reservoir during sustained droughts. I view that session as only a small part of the cooperative effort in which we must all participate to minimize the disruptive results of sustained drought.

You distributed a written position statement at the end of the session and asked me to respond to the four positions that you presented. Your first position concludes that the "reservoir operation plans and priorities should be adjusted to recognize contemporary needs, changing values . . ." This would be a consideration in the review of the Master Manual, which I have agreed to do, and will be the subject of the October 10, 1989 meeting we are planning jointly.

Your second position states that the minimum reservoir levels should be much higher than currently provided for in the Master Manual. This, too, could be a consideration in the Master Manual review.

Your position four proposes affording recreation and environmental values a higher priority than currently provided for in the Master Manual. This could also be a consideration in the review of the Master Manual.

Your third position requests that every option to conserve water this fall be explored and that potential options be implemented. I have identified five regulation options that would affect reservoir water levels this fall and early next year. These five options along with brief evaluations are enclosed. I have also enclosed a description of the current plan as a basis of reference for the options (enclosure 1).

The first option (enclosure 2) would reduce reservoir releases by providing only enough water to be 5000 cubic feet per second (cfs) below the target flows for full service instead of the current plan to be 1000 cfs below full-service targets. Although this would impact navigation, I believe the impacts would not be much more significant than those already being experienced. However, additional dredging may be needed. After receiving your comments, I propose to request comments on this alternative from the other Governors of the Basin States, Congressional delegations and navigation and recreation interests. I will seek responses within seven days.

Option two (enclosure 3) involves releasing water from Fort Peck Lake to stem the fall of Lake Sakakawea. This option would have an adverse impact on Fort Peck Lake. My decision to implement this alternative depends heavily upon the results of consultation with you and Governor Stephens of Montana.

Option three (enclosure 4) would provide no relief this fall, but would conserve water next spring through a delayed start of the navigation season. The decision on this option would be most appropriate after consultation with the navigation industry and the states with an interest in navigation. This will be a subject at the October 10, 1989 meeting and at the Public meeting on Missouri River Water Control on October 19, 1989.

Option four (enclosure 5) involves closing this year's navigation season six weeks early rather than four weeks early, as currently planned. I don't believe that this option is practical because service to navigation would be considerably less than that prescribed in the Master Manual. This deviation from the Master Manual would require extensive consultation and compliance with Federal statutes such as the National Environmental Policy Act, the Clean Water Act, and the Endangered Species Act. There is inadequate time to accomplish these actions and provide relief this fall.

Option five (enclosure 6) involves reducing service to navigation for 30 days effective mid-September, and extending the season for 30 days beyond the planned navigation season closing. Although water levels would be slightly higher this fall, this option is not prudent because the system would contain less water at the end of the navigation season due to the water "wasted" during the time flows were being reduced and again during the

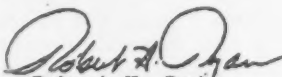
-3-

time flows were being increased. This option would have an extreme adverse impact upon navigation due to the need for tows to leave and then reenter the river and fulfill contract deliveries.

I would appreciate your views on options one and two as quickly as possible.

We are also pursuing each of the seven actions that I proposed in my opening statement. You adopted those actions in your joint statement. Most of the action plans will be completed by October 1, 1989. Review of the Master Manual will take longer and will depend upon the scope of the review. I look forward to working with you and the other Governors of the Basin in this review.

Sincerely,



Robert H. Ryan
Brigadier General, U.S. Army
Division Engineer

Enclosures

September 1, 1989

DESCRIPTION OF 1989 REGULATION PLAN
FOR THE
MISSOURI RIVER MAIN STEM

The Missouri River Main Stem Reservoir System Master Manual (1979) describes regulation of reservoirs to support authorized functions during all periods including floods and droughts. Service to authorized purposes is adjusted based on system storage on March 15, July 1 and September 1.

This year's plan, as developed this spring, was to schedule system releases at rates 3,000 cubic feet per second (cfs) less than "full service" and provide a season length less than the normal eight months. Minimum service described in the manual is 6,000 cfs less than full service but significant dredging would be required to maintain an adequate navigation channel. It was explained that, based on forecasted runoff and system storage projections, the season would be closed approximately four weeks early.

Service target flows are:			
Location	Full Service	Minimum Service	1989 tgt
	cfs	cfs	cfs
Sioux City, Ia	31,000	25,000	28,000
Omaha, Ne	31,000	25,000	28,000
Nebraska City, Ne	37,000	31,000	34,000
Kansas City, Mo.	41,000	35,000	38,000

Releases have been scheduled to provide flows adequate to maintain flows at target locations for some of the season but releases had to be restricted during the nesting seasons for terns and plovers. That period extended from mid-May through August.

Enclosure 1

September 1, 1989

DESCRIPTION OF REGULATION OPTIONS AND
IMPACTS TO FUNCTIONS FOR THE
MISSOURI RIVER MAIN STEM

Regulation Alternatives

***** OPTION 1. *****

Provide system releases that cause downstream flows to fall 3,000 cfs below full service targets in lieu of the targeted 3,000 cfs below full service. Continue the plan to discontinue navigation on November 1. A plan was implemented early this year to maintain flows at 3,000 cfs less than full service. Flows have fallen below targets for part of the summer because of restrictions imposed by the nesting endangered least terns and threatened piping plovers. We intended to increase releases when the birds fledged, which they now have. Recent rains have increased flows so an increase is not now needed (in fact, we have reduced releases). We could save a modest amount of water if we were to continue to schedule releases at flow rates that would provide downstream flows at 5,000 cfs below full service.

Navigation

Navigators could be expected to experience increased problems although not insurmountable. An evaluation of groundings this year may lead to a plan to regulate for flows 5,000 cfs below target. The fall shift (drop in stage without drop in flow when water temperatures decline) could aggravate the already shallow depths and narrow channel. It is believed that dredging would be required on the Missouri and that the impacts to the Mississippi would be modest (a 2,000 cfs flow reduction would result in a stage reduction of 0.4 feet if unseasonably low flows are again experienced).

Power

This option will not negatively impact power because while supporting navigation, adequate generation from the system exists. Potentially, the energy may be more valuable at a later date, depending upon when it would be generated.

Enclosure 2

September 1, 1989

(2)

Regulation Alternatives

***** OPTION 1. *****

RecreationReservoir

The slight savings of water would be a step in the right direction but the impacts would not be measurable. A system release reduction of 2,000 cfs would maintain pool levels in the upper three reservoirs 0.3 feet higher than with the current plan.

Open River

Marinas in the Sioux City area could expect to be functional but marinas in the Omaha area could be affected, if the lower tributaries continue to contribute significant flows and the navigation target location remains upstream from Kansas City.

Fish and Wildlife

No significant impacts.

Municipal, Industrial, and Irrigation intakes

No expected impacts to open river reaches. Savings of 0.3 feet in the three upstream reservoirs has a modest potential to impact intakes in reservoirs.

Enclosure 2

September 1, 1989

Regulation Alternatives

***** OPTION 2. *****

Transfer water from Fort Peck to Garrison. Fort Peck releases could be increased to near full power plant capacity in order to increase the level of Garrison. A release increase to 10,500 cfs rather than the planned rates of 6,400 and 8,300 cfs for September and October would result in an increased inflow to Garrison of 244 thousand acre-feet (kaf) in September and 135 kaf in October. It represents a net increase of 0.9 feet in September and 0.5 feet in October. The added draft at Fort Peck would be 1.3 feet in September and 0.7 feet in October.

Navigation

None

Power

The added fall generation resulting from increased releases from both Fort Peck and Garrison may be disruptive or detrimental. Western has committed to the purchase of energy for the winter period. Any change could result in net loss. There is one very significant advantage however. An added lowering of Fort Peck Lake has the potential for maintaining a lower lake level through the period of penstock replacement, thus reducing the possible need to release at full power plant capacity or to spill water during the outage.

RecreationReservoir

A benefit to Garrison but a cost to Fort Peck. A completed study demonstrates that a Fort Peck release of 10,500 cfs for September and October would result in an additional lowering of 2.1 feet at Fort Peck and a corresponding reduction in the lowering at Garrison of 1.4 feet.

Open River

No measurable immediate impact. Would not benefit recreation downstream from Fort Peck because of the season.

Fish and Wildlife

No significant immediate impact. Reduced releases from Fort Peck at some future date may be detrimental to pallid sturgeon which winter in "holes" downstream from the dam.

Municipal, Industrial, and Irrigation intakes

Potential impact to intakes in Fort Peck Lake but inventory is not available. There are significantly fewer intakes on Fort Peck than Garrison.

Enclosure 3

September 1, 1989

Regulation Alternatives

***** OPTION 3. *****

Delay spring 1990 season opening (initiate season on 1 May). Normal opening date is April 1 at the mouth at St. Louis. The staff recommendation for the 1989 season includes a 1-week delay in the opening of the 1990 season as partial compensation for the low runoff this year. An additional delay of up to 3 weeks is possible. The season would have to be opened before mid-May in order to avoid conflicts with endangered species.

Navigation

Would preclude the shipment of fertilizer up the river. Navigators have stated that this is important not only for the fertilizer shipments but it causes barges to be available for downstream shipments as well. It minimized traveling empty. The industry is a fragile one and may not stand much disruption. The Mississippi would benefit by the delay if the water were provided in the fall instead of the spring. A 10 day delayed opening conserves about the same volume of water as a 1 week closing in the fall. If the industry knew of a delayed season opening next year, possibly some of next years shipments could have been delivered this year. At this late date, however, little chance exist that needed arrangements could be made.

Power

Western can live with this option. We need to know early so that we can schedule the individual projects so that releases from Fort Peck and Garrison can be continued during the delayed opening in order to avoid the purchase of large blocks of power. Typically, releases from Fort Peck and Garrison are relatively high during when navigation is not being supported. Thorough study would be required to adjust schedules to result in the desired pool rises, yet still meet power commitments.

RecreationReservoir

Would result in more rapid increase in pool levels until the season is initiated. The three upper pools would gain an additional 0.3 feet per week of delayed opening.

Open River

This would delay the inputting of boats into the marinas until the season opens. Recreation use is relatively limited however during the early season.

Fish and Wildlife

The delayed opening should be no later than 10 May so that nests of least terns and piping plovers are not inundated by increased discharges. A delay in the opening could have a marked impact on the fish spawn downstream from Fort Randall and Gavins Point. Riverine fish need high spring flows to provide backwater habitats necessary in the production of fish food organisms and provision of escape cover for fry and fingerlings. Dewatering these areas has a significant impact on fish year-classes.

Municipal, Industrial, and Irrigation intakes

Would benefit reservoir intakes due to higher pool elevations. No impact expected on intakes downstream from reservoirs.

Enclosure 4

September 1, 1989

Regulation Alternatives

***** OPTION 4. *****

Closing of Missouri River Navigation 14 days earlier than November 1 (14 days used as example only). The industry has expected about a 4 week early closing of the 1989 navigation season. This was part of the reservoir release plan that included flows 3,000 cfs less than full service flows. The staff has recommended that the season be closed 1 month early (November 1 rather than December 1 at the mouth at St. Louis). A final decision has not yet been made. The earlier closing would be in addition to the recommended 1 month early closing.

Navigation

While navigators have not been officially provided this year's closing date, most are aware of the expected November 1 date. A closing on October 17 would likely result in the loss of the last scheduled trip into the river. While no contact has been made with the navigation industry, it is believed that the shipping schedules have been firmed up. Biggest cost would be to the Mississippi River where it is expected that the stage reduction will dictate the use of possibly three additional dredges (assuming continuation of drought).

Power

Would increase the purchase of power for the 14 day period and would be considered significant. The power marketing agency is concerned about the possible need to purchase capability if the drought continues and would much rather purchase energy than capability.

RecreationReservoir

During this recreation season would not be affected. Pool levels in upper three reservoirs would ultimately gain 0.9 feet in each of the three upstream reservoirs although the water savings would not be immediately balanced between the three.

Open River

Would not be affected to any great extent. Marina owners would have to notify boat slip renters of the need to remove their boats earlier than planned. Modest use of the river for boating exists in late season.

Fish and Wildlife

Would not be negatively affected. Earlier closing would permit the duck hunters longer to construct duck blinds.

Municipal, Industrial, and Irrigation intakes

Would benefit reservoir intakes due to higher pool elevations. No impact expected on intakes downstream from reservoirs.

Enclosure 5

September 1, 1989

Regulation Alternatives

***** OPTION 5. *****

Provide reduced system (Gavins Point) release (10,500 cfs) for a 30 day period this fall and then resume service to navigation for the balance of a normal season. Suggestion from North and South Dakota that the reduction to winter release for a period of time, hopefully about a month, would retain greater amounts of water in the system and maintain corresponding higher pool levels. Considered important in order to maintain access to the reservoirs during the fall period because of the fishing pressure, particularly the salmon fishing. States are suggesting that the navigation could be resumed for a short period following mid-October.

Navigation

If season disrupted for 30 days, shippers would have difficulty scheduling tows out of the river before initial closing and would have to reenter the river for a short period. Likely to cause less shipping due to very short time period following resumption of navigation and final closure. For same number of days of navigation support, would expend slightly more water.

Power

Western has committed to purchase energy based on our original schedule. A revision at this late date would reduce their need for the added energy they have purchased and would require them to purchase added energy during the reduced flow period. A change made with little notice can be expected to increase the purchase price of energy. A second impact relates to power plants downstream from the system. River water temperatures would still be high at mid-September and the State EPA requirement for allowable temperature differential would likely be violated. It may result in restricted generation from the plants along the river from Sioux City to St. Charles.

RecreationReservoir

The change could be scheduled to result in a higher pool at Garrison, the difference being 1 foot by mid-October. Fort Peck and Oahe would remain virtually unchanged in the short term. Slightly lower levels would be experienced by the end of 1989 than under the current plan.

Open River

Downstream from the system, the impact would be much greater. Prior to the reduced flow period, all boats (approximately 1200 to 1400) would have to be removed from their boat slips from marinas. All marinas are between Sioux City and Omaha. Many of these craft are large boats and would not be returned until next year. Dodge Park in North Omaha commonly places a plug in the entrance to maintain a higher water level during the winter months. Numerous large boats remain in the marina. Significant notice would have to be given to permit the needed removal of boats.

Enclosure 6

September 1, 1989

(2)

Regulation Alternatives

***** OPTION 5. *****

Fish and Wildlife

No significant impacts below the system have been identified. The reservoir fishery would not be expected to be impacted.

Municipal, Industrial, and Irrigation intakes

Slightly greater water consumed in this scenario so the additional reservoir drawdown, although extremely modest, could have an effect. The river reaches would remain unaffected with the exception of the potential power plant intakes. That problem relates to temperatures rather than water access.

Enclosure 6

Committee on Energy and Natural Resources
Subcommittee on Water and Power

Hearing on
Upper basin impacts of low water levels in
Missouri River Reservoirs

October 9, 1989
9:30 a.m. - 12:30 p.m.
Pioneer Room of the State Capitol
Bismarck, North Dakota

Written statement of Michael H. Gunsch, P.E.

I have been working with North Dakota water resources since graduating from North Dakota State University in 1981. It is not unusual for a man of General Ryan's stature not to be aware of all the details of the Missouri River which is under his command. It is odd, however, that he was asked the same question at several public meetings and did have an answer on either occasion. I ask the committee to request that the General and the Corps furnish the following information:

"The amount of tonnage and composition of those materials hauled during each navigation season by the Corps of Engineers compared to that hauled by private federally subsidized shippers?" The data for this season would be particularly interesting but all years should be included.

The recreational aspects of Lake Sakakawea are not lost just the access. This includes not only boat access but the water supplies for many resorts and cabin owners. The water supply of cabin owners is a consumptive use but not listed under Municipal and Industrial as I believe is noted in the Master Plan.

The General also did not know the reason why the 1775 msl elevation was set as the low level draw down for Sakakawea. This again does not surprise me but I would request the committee ask the General the following:

"Is not the 1775 msl elevation for Lake Sakakawea set so that water can still be provided to the Snake Creek pumping station and subsequently to the Garrison Diversion irrigation system that has yet to be completed?"

Written Statement of Michael H. Gunsch, P.E.
Page Two

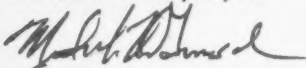
If the water goes below 1775 msl it would be unavailable for pumping into Lake Audubon and use by the Garrison Diversion Irrigation Project. On the subject of Garrison Diversion Steve Herman's testimony at this hearing said it best. In North Dakota we are people of our word and it "means something". The promises to North Dakota by the federal government have not been met. North Dakota looks at the federal government as a fair-weather friend when it comes to Lake Sakakawea and Garrison Diversion. When they need us they take from us through promises of wonderful things. When they don't need us we get ignored and spurned for asking for a little help to maintain what little of the promise has been kept.

The answers to the questions posed at this hearing would appear to be complex in solution but need not be. At present we have an access and supply problem. The Corps need "AUTHORIZATION" to "HELP". This will take some type of congressional action and allocation of funds as we all know but need not be complicated. The cost of ramp improvements and supply restoration should not exceed five million dollars. The proposed \$1.6 million will help but the time has past for a band aid we need stitches.

The underlying solution is for the federal government to make good on its word and keep its promises to North Dakota for irrigation, municipal rural and industrial water and recreation.

Thank you for holding this committee hearing in Bismarck so that those most affected by lake level conditions could attend.

Submitted 10/10/89



Michael H. Gunsch, P.E.

Send to: Thomas C. Jensen, Counsel
Committee on Energy and Natural Resources
United States Senate
364 Dirksen Building
Washington, DC 20510

STATEMENT TO U.S. SENATE WATER AND POWER SUBCOMMITTEE

BY: Andrew Mork, Chairman
BOMMM Joint Water Resource Board

The BOMMM Board is a joint water resource board of the five counties adjacent to the free flowing reach of the Missouri River downstream from the Garrison Dam in North Dakota. Our main purpose is to promote the protection of the banks of the Missouri River and to prevent loss of valuable land. We are also interested in all other aspects of the river in this reach.

We are aware of the extremely low water levels behind the Garrison and Oahe Dams after these drought years and the problems they are creating. We agree that the operation plan for the Pick-Sloan Dams should be reviewed and adjusted to include the now important recreation and tourism industry on the upper Missouri.

However, we are concerned about 70 miles of free flowing river from the Garrison Dam downstream to the Oahe Reservoir. The water levels in this reach are controlled entirely by the releases at the Garrison Dam. We also have our own uses of the river, including municipal and industrial water intakes, irrigation pump intakes, boating, fishing and endangered species considerations.

All of the above users agree in the flow rates required in this reach. We need summer flow rates of from 20,000 to 24,000 c.f.s. Below this minimum some pump intakes cannot reach water and boating and fishing are curtailed. Above this maximum bank erosion becomes severe and sand bar nesting habitat and beach

recreation areas are inundated. We also need lower winter power release rates until more bank protection is constructed since this is also a critical time for bank erosion. Fall and spring releases are not too critical since at this latitude recreation uses are minimal, although Garrison releases sufficient for municipal and industrial uses must be maintained.

The summer releases in 1989 of 22,500 c.f.s. were ideal for all our river uses and can be used as a model year.

We realize due to precipitation extremes that our goals cannot be achieved, but we want all river planners to know that our 70 miles of river is also becoming intensely utilized and that we also have our river level requirements. May through August are especially critical for us and we hope we can receive special consideration then.

Thank you for allowing me to submit this statement.



NORTH DAKOTA PARKS AND RECREATION DEPARTMENT

Pinehurst Office Park
1424 West Century Avenue
Suite 202
Bismarck, ND 58501
Phone: (701) 224-4887

MEMO TO: Governor George A. Sinner
FROM: Doug Eiken, Chairman, EDC Roundtable - Tourism Cluster *DE*
SUBJECT: Loss of Business Infrastructure on Lake Sakakawea
DATE: August 14, 1989

I wanted to emphasize a new concern over the lowering of water levels on Lake Sakakawea that is not generally understood, except by those directly affected. This loss is the economic tragedy that is occurring within the small businesses on the lake who have closed or are suffering severe impacts from the extreme low water levels on the lake. The commercially operated infrastructure that we have nurtured is now being decimated, with little hope of recovery. Extending boat ramps to chase the water is a solution for our local recreationalists, but it does not address the problem faced by many of these concessionaires who have committed their time and energy over the years to develop a tourism industry on the lake only to see it slip away because of low water.

The commercial viability of tourism on Lake Sakakawea is being threatened by these continuing water level problems. I indicated to you in my July 10, 1989 memo, 1823 is the critical water level to maintain many of these businesses. After my tour this weekend, 1825 seems to be the limit of survival for many. The water level is already below 1825 and we may only have three ramps on the entire system operating on Labor Day if new Corps projections are accurate.

I understand the following businesses have either already closed and will not reopen, or have serious financial problems: Slater's Resort near Dunn Center; Skip and Ann Krause's Pebble Inn at Fort Stevenson State Park; Fort Stevenson Marina operation; Van Hook Recreation Area; Lund's Landing; Tobacco Gardens and White Earth Bay Concession. The only businesses who seem to be viable at this time are those without access problems, located primarily on the eastern half of the lake. The closings and the threat of lower water throughout 1990 will have a major impact on our tourism industry.

This is the second year of low water and a third year of problems seems imminent. Many of these businesses are located in areas where it is not feasible to extend boat ramps, therefore they have no choice but to close their businesses. Rent, loans, leases, taxes and other ongoing expenses must be met. There is no income or drought disaster relief payments to meet these expenses and therefore I'm afraid many of the businesses will not reopen.

I know the problems that can occur when asking the Corps to shut down the reservoir system to conserve water. However, maybe this extreme action is justified to try and maintain the tourism infrastructure that we have taken so long to build on this great resource.

If we had the funds to extend ramps on the lake, we can at least provide some access for the fishermen and recreationalists on the east end of the lake throughout next year. However, without maintaining the water levels at a minimum level of 1825, we will have little recreational use from the Van Hook area westward and destroy much of the business structure we have developed. And, in my view, the possibility is great that we will have great difficulty in re-establishing confidence of the business and financial community to make future investments on the lake.

This is the underlying issue that someone must address. And, I believe it can only be addressed by insuring the business community the Corps will maintain a minimum water level of 1825 throughout the Memorial Day to Labor Day season.

DE/kmm

cc: Chuck Fine
Bill Patrie
Jim Fuglie

10-01-89

Bismarck, ND

58504

Senator Conrad,

There is another lake on the Missouri River System in N. Dak. called Lake Oahe which is managed also by the Corps. of Engineers.

At public meetings it is emphasized how bad things are on Lake Sakakawea. Checking The Bismarck Tribune, I find that Lake Sakakawea to be down 27 ft and Lake Oahe 37 ft.

Members of the Bis-Man Reel and Rec Club (1100 members) would like to use the system south of the Hazelton boatramp if there would be ramps as promised to us by the COE.

In a letter (4-14-89) to me from the COE gives a summary of what they had planned to do at each ramp site. In each case less than desirable action took place. At Ft. Rice they put in a portable ramp which was so steep that people with large boats could not get them out because they couldn't get any traction on the metal grid. The additional parking at the Hazelton ramp never got off the ground. Cattail-Winona was not useable most of the summer.

As of this week (10-01-89), ramps on the west side of the river from Mandan to the South Dakota border are not useable. The ramps south of Bismarck are getting very questionable. If some action is not taking now, next year we will find everything high and dry.

I'm wondering if you could use your influence to reverse the common thought of the ramps chasing the water to the water chasing the ramps. If the only thing at stake here was boat access our problems would be small. I see new ones cropping up. Less water means less area for fish habitat. Water dropping means if fish do spawn, their eggs will be high and dry when they hatch. Less area to recreate and etc.

As I cannot attend your meeting on Oct. 10th, I would like you to use this letter as my testimony that Oahe has a problem with water too. Someone needs to address it soon.

Chasing water is not the answer. Another dry year will find our source down much more. We have to find ways to conserve more of what is there.

Enclosed is a copy of a letter I received from the COE and I would appreciate if I got it back.

Reinold Kellar

Reinold A. Kellar

Bis-Man Reel & Rec
1211 Albany Drive
Bismarck, ND 58504



REPLY TO
ATTENTION OF
Lake Manager

DEPARTMENT OF THE ARMY

OMAHA DISTRICT, CORPS OF ENGINEERS

LAKE OAHE OFFICE, P.O. BOX 907

PIERRE, SOUTH DAKOTA 57501-0907

April 14, 1989

Reinold Kellar
1211 Albany Drive
Bismarck, ND 58504

Dear Mr. Kellar:

This is in response to your letter of 04 April 1989, concerning specific boat ramps on Lake Oahe in North Dakota. The following is a summary of current status for each of the ramps you mentioned. In addition, we have provided additional information on other ramps on Lake Oahe in South Dakota.

a. Cattail-Winona Bay. We have awarded a contract for extension of this ramp with concrete planking. The planking will be placed down to elevation 1593.0. The work is to be completed by 30 May 1989.

b. Beaver Bay. If projected water levels become a reality, neither ramp at Beaver Bay will be usable this year. There is no economically feasible

way to extend either of these ramps. We have considered alternative sites for a ramp but there are very few that have the desirable characteristics of being near the river channel or having good road access.

c. Fort Rice. We have selected a site approximately 1/4 mile south of our existing concrete ramp. Potential problems concerning cultural resources have been resolved. As of 11 April we have completed our necessary field surveys and will be preparing design and contracting materials for contracting necessary work. We anticipate that the portable ramp will be in place by the end of April.

d. Hazelton. We will not be modifying our existing ramp at this site. This ramp was the only usable ramp with last fall's water levels. We anticipate that it will again be usable through most of this season. We are aware of the concern for additional parking at the Hazelton ramp area. We are pursuing obtaining access via private landowner to Corps' property to an area immediately south of the existing parking lot. We are also looking at the possibility of expanding into the area across 1804 to the east of the existing parking lot. We anticipate that we will potentially resolve the parking lot concern by mid-May.

-2-

e. Fort Yates. Although not identified on your list, we have evaluated the conditions of the Four-Mile Bay area and are reaching the conclusion that a suitable site for placement of a portable ramp may not exist at this location.

If you have any questions on these matters, please call on Doug McDonald, of my staff in Bismarck, at 255-0015. He is temporarily on duty in Pierre until 21 April 1989, and can be reached until then at 605/224-5862.

Sincerely,

Cliff Weber

Cliff Weber
Lake Manager

1 encl.

Sinner calls Corps' Missouri River plan 'preposterous'

BISMARCK (AP)—Federal management plans for the Missouri River's reservoir system next year are "preposterous" and don't consider the effects of the upper Great Plains' lingering drought, Gov. George Sinner said.

Sinner, in a statement Thursday, called for a two-month delay in the beginning of the Missouri River's downstream navigation system and substantial cuts in water releases from federal dams.

But Dale Sveum, a Corps spokesman in Omaha, Neb., said the changes would force the Corps to abrogate its master plan for managing the river system. The plan is now being reviewed in light of complaints by Sinner and representatives of upstream states.

"We're going to evaluate what we get from the publics in the various states before we decide how we're going to support navigation next year," said Sveum, who is chief of the Corps' reservoir control center in Omaha.

The Corps' preliminary operating plan for the Missouri River calls for only slight changes in the practices that have led to considerable water loss from Lake Sakakawea, Sinner said.

The plan is "business as usual," Sinner said. "In light of the past three drought years and forecasts for low moisture next spring, business as usual is preposterous."

Sinner's statement called for opening the river's 1990 navigation season on June 1 and cutting dam water releases by 2,000 cubic feet per second. Those practices would not follow Corps policy, Sveum said.

"Even though the master manual (for operating the Missouri River system) is under review, we can't throw the rulebook away," he said.

The Missouri's navigation channel, which stretches 742 miles from Sioux City, Iowa, to where the river joins the Mississippi, normally opens April 1 and closes Dec. 1, Sveum said. It closed Nov. 1 this year and will open at April 8 at

the earliest next year, he said.

The Corps has cut back on dam releases already, Sveum said. "We're not doing business as usual. We've made changes. The governor simply believes the changes aren't as drastic as they ought to be."

The Missouri's main reservoirs — Sakakawea, Fort Peck in Montana and Oahe in North Dakota and South Dakota — are all 20 to 23 feet lower than they normally are at this time of year, Sveum said.

Falling lake levels at Sakakawea have driven away tourists and ruined businesses, says Sinner, who contends upstream recreation interests are being sacrificed to placate different constituencies downstream.

Recreation "has become a very large industry, substantially larger than navigation on the Missouri River," Sinner said.

But Sveum said downstream states had other interests besides navigation, such as recreation and water supply.

"It's not really fair to make this strictly a battle between recreation and navigation. There's more to it than that," Sveum said.

Meanwhile, Sen. Kent Conrad said he introduced a bill Thursday that would give North Dakotans a greater voice in how the Corps manages water levels on Lake Sakakawea.

The measure would require the Corps put a drought management plan in place for the lake that would include notifying local residents when low rainfall and runoff conditions would change water levels, said Conrad, D-N.D.

The legislation also would designate recreation and water conservation as official purposes of the Garrison Diversion project and establish a citizens' advisory council to help resolve disputes between the Corps and local residents, he said.

"We can't have the Corps simply ignore the needs of North Dakota," Conrad said in a written statement.

Some say corps selling N.D. down river

By NORMA DUFFLER, Tribune Correspondent

RIVERDALE — Last year Lake Sakakawea lost one-third of its water volume to drought.

This year the Corps of Engineers that operates the dam has promised to conserve water. But while the lake level continues to fall, the Missouri River rises.

Some North Dakotans wonder if the state's water is secretly being sold merrily by corps policies that favor the more politically powerful downstream states.

"I've been watching the river," says former Gov. William L. Guy. "The corps is lying on the water releases. They are letting out way more than they say they are. I'm pretty damn disgusted. What is

happening to the lake level is a symptom of what is happening to North Dakota's control over their water. Now the corps and WAPA (Western Area Power Administration) has total control. We are captive to the feds."

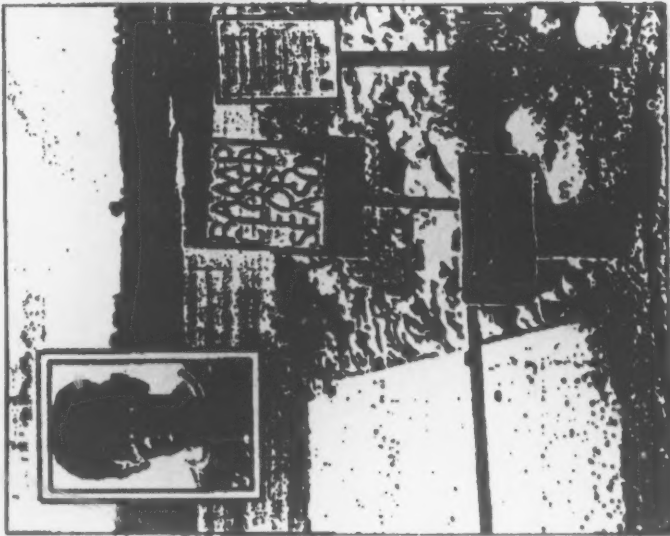
The lake, built to withstand a 12-year drought according to the corps, is down to 14.4 million acre feet from 23.9 million acre feet when full.

Though the corps says normal summer releases average 20,000 cubic feet per second, and this summer's releases have averaged only 22,500 cfs, the apparent high water on the Missouri River has people doubting those figures.

Duane Stearn, chief of reservoir control for the corps in Omaha, stands by the corps' math.

"It's bull that we are letting out more water than

(More on CORPS, back page)



Closed boat ramps reflect the low water levels. EV Hanson, inset, questions the corps' figures.

8-27-89
Front Page

Lake Sakag

Corps: Mandan man compares releases from the last few years.

CONTINUED FROM PAGE 1A

we say we are."

He also says the six-dam system has to be regulated as a whole and the corps is taking water conservation measures.

"Of course, the discharges fluctuate during the day, but the average was 22,500. As to water conservation, we delayed the start of the navigation season by one week and are ending it four weeks sooner. We are releasing less water than the 20-year average, which is 28,000 cfs in June, 30,000 cfs in July and 29,000 in August.

"We are reducing flows in September and October to 14,000 cfs, November and December will be 20,000 and January 25,000. We will be producing less electricity," he said.

Ev Haunson of Mandan was so angry after the corps' lake manager Bob Kindrick told him the Missouri River wasn't any higher than usual that he dug through five years of Bismarck Tribunes to get lake and river levels, as well as releases.

Those records showed water has been flooding out of Lake Sakakawea 4,000 to 5,000 cfs faster than during summers dating to 1965.

Haunson found that from 1965 through 1968, water releases were between 17,500 and 19,000 cfs with rare exceptions. River levels at Bismarck, while as low as 5 feet 5 inches, usually hovered between 6 feet 3 inches and 6 feet 5.

In comparison, the Missouri has been 7 feet 6 to 7 feet 8 this summer.

Another indicator of higher water has been the absence of sandbars in the river.

"I haven't seen a sandbar all summer," says boater James Riggie of Bismarck.

Riggie recalls hearing the corps promise water conservation at a meeting last year.

"Then the corps gave us a token.

They extended some boat ramps. Now they've taken away more feet of water level in the lake. We're in the same situation we were in last summer before the extensions."

Riggie figures it will take the lake five or more years to recover with average precipitation.

The corps says that there is one chance in 10 the lake could recover in a year with abnormally high precipitation and snow pack. Otherwise it will take five normal years.

Sveum says the predicted low is 1,818 feet this February, but Jeff Esslinger, staff aide for Gov. George Sinner, says he was given a projection of 1,814 at a meeting with the corps last Monday.

Since Sakakawea is built like a funnel, it takes much smaller releases to lower it a foot now than when it was near capacity. It will fall one foot in one month with only 4,400 cfs discharge.

And if the lake were to fall 16 feet from its summer peak as it did last year, the low could hit 1,811 in February.

Pick City Mayor Connie Parish, concerned about municipal water supplies as well as recreation and other uses, asked the corps when the lake would be totally shut down.

"I was told that when it hits 1,775 there is no more pumping, nothing to the power plant, nothing to Lake Audubon. The way they are dumping water out of the lake, we could see that happen."

Sveum says that barring a 12-year drought that will not happen.

But Pick City is already having trouble getting municipal water because of the low lake level.

"We've replaced our water pumps twice, thinking they were bad," Parish says. "It turns out that they just can't pump water that high. We're just hoping that a bigger pump will be able to do the job."

Other water users are also hav-

ing difficulties.

At the Wayne Boeshans farm north of Beulah, irrigation water has to be pumped in two stages to get to the crops instead of being trapped in a reservoir and pumped once like other years.

Other farmers have had to forgo irrigation or install thousands of dollars worth of new pipe and pumps.

"North Dakotans have to realize that every gallon of water going downstream costs them money," says Riggie, who didn't bother to put his 31-foot cruiser in the lake this season.

"This is ruining tourism," he says. "Oh, I could have gotten my boat in the water in July, but I would have had to have taken it out already, so it just wasn't worth it. Normally, I'd use 1,000 gallons of fuel in a season. This year I've only used \$35 worth for boating."

Sinner, also concerned about tourism, has threatened to join the South Dakota governor and the other corps.

Esslinger says he came out of the meeting with the corps with some hope.

But, he adds, "The crux of the issue is that the corps continues to let water out to benefit the downstream states with little regard for how much water is in Garrison. All other interests on the lake like irrigation, flood control and recreation are balanced against navigation."

Guy thinks courts are the only answer.

"The upper Missouri states don't have the political clout of the lower Missouri states," Guy says.

Also, the corps has moved navigation to top priority, when according to the O'Mahoney-Millikin Amendment to the 1940 Flood Control Act, navigation is to be low priority, and water used for it only as long as it doesn't conflict with beneficial water uses upstream."

09/12/89

14:35

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Minot Daily

9-12-89

A1

Residents band together to save Lake Sakakawea

By GRANT GROSS
Daily News Staff Writer

NEW TOWN — The New Town Chamber of Commerce's call to action to "save Lake Sakakawea" was met with many questions but few answers in a town hall meeting here Monday.

Most of the 60 people who attended were concerned with the lake's declining level, but they were not sure how to keep the Army Corps of Engineers from releasing more water from Garrison Dam.

'We have to find some way to stop the Corps from releasing that much water. Come on, people, let's get mad and do something.'

Neil O. Nelson, editor of the New Town News

"We have to find some way to stop the Corps from releasing that much water," New Town News editor Neil O. Nelson said. "Come on, people, let's get mad and do something."

The first step, the group decided,

is to contact North Dakota's congressional delegation. The chamber had copies of five letters, each addressed to all three congressional delegates, which people could sign and stuff into an envelope. The

See LAKE — Page A3

□ Lake

(Continued from Page A1)

chamber mailed the stack of letters to Washington today.

Other suggestions ranged from bringing a lawsuit against the Corps to circulating petitions, but most of the crowd agreed that they would need more information about the Corps' release policies before proceeding.

Local farmer Jay Sandstrom also suggested that the group join the Sakakawea Audubon Recreation Development Association, a Garrison-area group that is also working to slow water release from the dam.

Several in the crowd, including Hugh Baker, a councilman with the Three Affiliated Tribes of New Town, suggested calling for a congressional investigation into how much water the Corps needs to release to maintain working power generators downstream.

"I think tomorrow, if they were to ask for a congressional investigation, they would get it," Baker said.

Baker and Sandstrom questioned the group's basis for a lawsuit, saying the Corps probably does not have a contractual obligation to maintain a certain water level.

The group's concerns stem from falling water levels on the lake, and as the water falls, so does the summer tourist business in New Town. Because of the falling lake level, area marinas have had to adjust this year, often extending their boat

Mike Rensch, president of the Chamber of Commerce, told the group that the water level could fall even further after the Corps plans to begin releasing 57 percent more water in November.

The lake's 1988 peak was at about 1,838 feet, and the current lake level is about 1,823 feet above mean sea level. But Rensch said the Corps predicts the level will be at 1,816 to 1,819 feet at the end of March. Rensch then quoted statistics saying the Corps' lake level estimate was an average of 10 feet too high in 1988.

"With the current project they've got and their current track record, we could be at 1,809," Rensch said.

Rensch asked several people in the audience what would happen if the lake would dip down to under 1,810.

Talking about the Van Hook area, long-time Van Hook resident Morris Johnson said: "Outside of the old Shell Creek bed, I would guess that there would be no water there at all."

And Glenn Brunell, manager of the Pouch Point resort area south of New Town, added: "If this lake drops eight or nine feet, hell, we're all out of business."

Rensch said his group is stalled until they know what the Corps plans for the lake level. "It's difficult for us to promote Lake Sakakawea when we don't know what the level of the lake is going to be."

U-6 Minot (N.D.) Daily News, Sunday, September 17, 1989

Our Views

It's time to fight

There is nothing more beautiful, more utilitarian or more controversial than a river.

In this region upstream-downstream battles over the Missouri and Souris rivers date back to the 1930s with a few repercussions even before that.

A compact formed among the states bordering the Missouri to try to work out compromises to diminish the conflicts and strike a reasonable accord never really approached that goal. Now it is no longer a factor as a peace-keeping force in the valley.

North Dakota looked upon that body as a means of not only ironing out upstream-downstream differences but also as an agency that would have a strong voice in allocating Missouri River water for upstream as well as downstream usage.

Without that kind of a compromise group, the Corps of Engineers finds itself between a rock and a hard spot in trying to strike a balance between the areas that want to hold some of the river's waters for their use and those who want upstream dams only to provide a continuous flow in the big stream for downstream use. In dry years, like the last two, the pressure on the corps in flow management has been intense.

Like any other branch of government, the corps tries to respond to public opinion — within rational realms — in coming to grips with water allocations. Our problem is that downstream states have more political clout than we do. That's undoubtedly one reason why the governors of the two Dakotas have entered the fray — to try to balance downstream political pressure.

With the relatively quiet period of the early '80s, abetted by close-to-normal flows in the river, the upstream-downstream controversy abated somewhat. Enough to encourage the North Dakota Water Users Association to assume that this state could make some new claims on Missouri River water to replace the losses sustained here by the severe cutback in the Pick-Sloan plan of the early 1940s in sharing the assets of that great stream.

There's concern in high places in North Dakota that the Corps of Engineers assigns the water in Lake Sakakawea to the category of "recreational usage." The category gets a low priority assignment. We think that's a bad rap.

The upstream case for becoming more than just a route for delivering water to Missouri and other downstream states in a strong one. The North Dakota Water Users Association recently pointed out that this state's opportunity to be more than an arid entity hinges heavily on help from the waters of the Missouri.

The study backing that claim pointed out that the entire combined flow of the Shyenne, Souris and Red rivers, at measured points, provides only 4 percent as much water as the Missouri River does at Bismarck. The Water Users want a share of that Missouri flow to bolster water supplies in the valleys our smaller rivers are overtaxed in trying to serve.

Being able to hold a fair share of Missouri River Water is an issue worth battling over. It is the best key we have to opening the door to a prosperous and balanced way of life in the future.

A valid case to inspire the two Dakota governors to take off their gloves and go in there fighting.

Figures may sink corps' argument

By NORMA DUFFLER, Tribune Correspondent

RIVERDALE — Downstream navigation is a big user of Missouri River system water, but the cost is high and the barge traffic it floats is only a drop in the bucket when it comes to U.S. shipping, says Vern Fahy, former state engineer.

Fahy says the U.S. Army Corps of Engineers' own figures tell the story.

Much of the 9 million acre-feet that was drained from Lake Sakakawea in 1968 and 1969 was to provide for navigation in politically powerful downstream states.

Fahy says federal expenditures on Missouri navigation in the 1970s were 13.9 mills per ton mile,

compared with .13 of a mill on the Mississippi.

"Of course, farmers in the downstream states are quick to say that without barge traffic as competition, their rail and truck freight rates would go up," says Fahy.

North Dakota farmers don't enjoy barge freight competition to keep their freight rates down, Fahy notes, but the state had to give up some of its best bottom land to support the dam system.

"There is no question that navigation is a very high use of water, yet barges are shipping less than 3 million tons annually on the Missouri. Someone should do a study to see the costs vs. the benefits," says Fahy.

Paul Johnston, chief of Public Affairs for the corps in Omaha, says balancing uses for the Missouri River

(More on WATER, back page)

Water: Barge owners unhappy

CONTINUED FROM PAGE 1A

system water is difficult.

Uses are flood control, navigation, hydroelectric power, irrigation, water supply and quality, recreation and fish and wildlife.

"They are not prioritized. Both recreation and fish and wildlife are relatively contemporary purposes," says Johnston.

He says the disparity of costs between shipping on the Missouri and Mississippi are due to the difference in tonnage — 100 million tons on the Mississippi.

He says the corps' balancing act, using relatively high water re-

leases to give barge owners a 3-foot deep channel, angered people downstream, too, including barge owners.

"Barge owners were not happy because they had to load light. Where they used to load to 8 1/4 feet in the water, this year they were only able to load to 7 1/4 or 8. That last foot is where their profit margin is. Also, where a boat normally tows nine barges, this year they were only towing six."

The corps has also shortened the navigation season by five weeks this year to save water.

Fahy is unswayed by the corps rationale, however.

Montana, South Dakota and North Dakota looked to the O'Mahoney-Millikin Amendment to the 1944 Flood Control Act to protect water in their planned reservoirs, he says, but the corps seems to ignore the amendment now that the reservoirs are in place.

"The O'Mahoney-Millikin Amendment said that water was to be used for navigation, but not to the detriment of beneficial consumptive uses upstream. I'd certainly say that municipal water use and irrigation were beneficial consumptive upstream uses," says Fahy.

Bris TRIB 9-20-89 p.1

DAKOTA

(1)

Fort Yates fears loss of water

By VIRGINIA LUCER
Inland Correspondent

FORT YATES -- Low water on Lake Sakawewa has generated more headlines this year, but there are also serious problems on Lake Oahe.

Fort Yates residents are worried about their municipal water supply, drawn from the lake. After struggling through the low water season of 1969, they reached out and

felt with a new intake structure. Now this structure is in danger of being hit high and dry.

Clayton Iwairi, water plant foreman for the Bureau of Indian Affairs, said the two other intake structures are already shut down.

The one 300 feet out is exposed, and the one 600 feet out is buried in mud.

The remaining intake, at 800 feet, has plugged up six times in recent weeks, Iwairi said. This usually happens when a swift wind causes the lake to rise slightly and wash shore debris into the water.

The debris gets sucked up with the water and clings to the screen covering the intake opening. The only way it can be removed is by

bov'ashing -- a procedure that wastes previously processed water



By VIRGINIA LUCER, U.S. Army Corps of Engineers

Fort Yates is doing everything it can to conserve water.

the pinch of lost revenue due to the lack of fishermen.

Now that the U. S. Army Corps of Engineers will be holding back water upstream at Lake Sakawewa has residents

wondering if Oahe will be dropping still further.

intake structure might freeze up this winter.

Already inoperable are the Standing Rock reservation's irrigation system and all of the boat ramps on either side of the lake from Fort Rice to the South Dakota line. Merchants have felt

by forcing it back through the system and on the intake.

Water plant personnel estimate the usable intake is about 12 feet under water. Maurice Andell said, "A real concern is that, if the water continues to go down, the

123/10/69
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Minot Daily AL 9-8-81 Corps policy brings angry call to arms

*Little
Sakaka*

By CARL O. FLAGSTAD
Daily News Staff Writer

NEW TOWN — "We're mad as hell and we're not going to take it any more."

The New Town Chamber of Commerce made that declaration in a full-page newspaper advertisement recently and has called a town hall meeting to organize a campaign to "save Lake Sakakawea."

The meeting is set for 6:30 p.m. Monday in the New Town Civic Center with all "friends of Lake Sakakawea" from the area invited to attend.

The target of the chamber's wrath is the U.S. Army Corps of Engineers, which through its Missouri River Division at Omaha, regulates the releases from the six main stem dams on the Missouri River including Garrison Dam forming Sakakawea.

Using the language of the ad, Mike Rensch, Chamber president, summed up the feeling of his organization.

"They're taking the lake from us," he said.

"Well, let's see what a maverick, small western North Dakota town can do to stop it."

The lake's level is now down to 1823 feet above mean sea level and is continuing to go down. It plummeted to 1820 earlier this year — five feet below the previous low — and even corps officials have projected it could fall to 1818 or blow by next spring. That's more than 30 feet from the optimum operating level of 1850 feet.

Three years of below normal snow melt from the mountains of Wyoming and Montana and drought conditions in the plains are blamed by the corps for the predicament. The corps is required by law to give priority to providing water for navigation on the lower Missouri — although it did reduce the barge season by five weeks this year.

Critics see it otherwise, complaining the corps is discriminating against North Dakota.

The Chamber advertisement in the New Town News says:

"The Missouri River at Omaha is high on the banks. On Lake Sakakawea where a record low crest was reached earlier this summer, the water level is at 1823 and dropping. They tell us it isn't going to get any better, prepare for a crest of 1814 next spring."

The Forum

Missouri River states asked to cooperate

18-11-69 (C-7)
Omaha, Neb. (AP) — North Dakota Gov. George Sinner Tuesday called on other states to cooperate in sharing water resources along the Missouri River and criticized federal officials for catering to navigation interests even at times of drought.

Sinner and South Dakota Gov. George Mickelson were among those who asked for a review of policies governing the river during the Missouri River Basin Governor's Forum in Omaha.

Brig. Gen. Robert Ryan, the chief of the U.S. Army Corps of Engineers' Omaha district, outlined an aggressive process for reviewing the Missouri River master management manual to meet the needs of all states that rely on the river.

He called on the 10 Missouri Basin states to cooperate in the tightly scheduled review. The corps chief said he hopes to complete a review within the next six months.

Midwest drought conditions in various parts of the basin in recent years have yielded too little runoff to satisfy all states along the river.

States in the upper basin — Montana, North Dakota and South Dakota — want reservoir levels to be kept high for recreation and irrigation purposes. States in the lower basin — Nebraska, Iowa and Missouri — want river levels high enough for navigation and water-supply purposes.

Low water levels also have caused problems for fish, creating a need to manage both upper and lower river reaches as one system, said Kent Keenlyne, Missouri River Coordinator for the U.S. Fish and Wildlife Service.

Sinner said the 1966-69 drought had reduced water storage in the upper basin reservoirs, particularly Lake Sakakawea in North Dakota and Lake Oahe in North Dakota and South Dakota, by about half. The corps, which sets releases from the dams that affect reservoir levels, has allowed the reservoirs to drain while "catering strongly to navigation" interests, he said.

Sinner said tourism industries in both Dakotas have suffered. About half of North Dakota's boat ramps don't reach water, he said.

10/30/69

10:30

SENATOR CONRAD FARGO

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The Forum

Burdick sends Bush protest about corps' river management

By Mikhal Poles
STAFF WRITER

10-28-89

A-6

Sen. Quentin Burdick, D-N.D., is complaining to President George Bush that the U.S. Army Corps of Engineers is mismanaging Missouri River flows and is dragging its feet on reforms.

"The corps thinks it can continue business as usual, even after they've been clearly told on numerous occasions of the need to change their operating policy," Burdick said in a letter to Bush.

North Dakota and South Dakota officials have complained to the corps that reservoir levels have been allowed to go too low during these years of drought.

Meanwhile, downstream interests are feeling the pinch from low water levels.

On the Mississippi River, barge traffic might have to end by mid-November because of low water levels. About 70 percent of the Mississippi flow below St. Louis comes from the Missouri River.

"We've got a stage set for quite a disaster on the Mississippi this winter," a U.S. Corps of Engineers official in St. Louis said in a news report.

Duane Sveum, chief of the Corps of Engineer's Missouri River reservoir control center in Omaha,

Nebr., said the river is already being managed for a drought.

Sveum said releases from North Dakota and South Dakota reservoirs "in support of navigation" on the Missouri River will be cut off Nov. 1, instead of the normal Dec. 1.

He said flows past Gavins Point, S.D., have been cut about 10 percent during the drought. He said the corps plan is geared to a drought as bad as in the 1930s.

Sveum said a review of economic priorities on the Missouri will be complete in about six months.

Tom Skirbunt, a staff member on Burdick's Senate Environment and Public Works Committee, said the reduced water releases will do little to maintain higher reservoir levels, which North Dakotans complain is ruining recreation and tourist trade.

Skirbunt said the real issue is how many acre feet of water are released from the reservoirs. "Those figures are fairly constant," Skirbunt said.

He said the corps has no good way of weighing economic impacts among varying economic groups and its officials "seem to have a hard time conceptualizing this kind of analysis."

Lake Sakakawea

Residents say state being sold down river

RIVERDALE (AP) — North Dakotans who work and play along Lake Sakakawea fear their interests are being sold down the river.

While the lake levels continue to fall, they say, the Missouri River rises, and they blame the U.S. Army Corps of Engineers.

"I've been watching the river," former Gov. William Guy said. "The corps is lying on the water releases. They are letting out way more than they say they are."



Guy

"What is happening to the lake level is a symptom of what is happening to North Dakota's control over their water," he said.

Lake Sakakawea, which the corps says is built to withstand a 12-year drought, is down to 14.4 million acre-feet from 23.9 million acre-feet when full.

The corps says normal summer releases average 29,000 cubic feet per second, and this summer's releases have averaged only 22,500 cfs. But the apparent high water on the Missouri River has people doubting those figures.

Duane Sveum, chief of reservoir control for the corps in Omaha, stands by the corps' math.

See SAKAKAWEA — Page A5

Minot Daily

A-1

8-29-89

□ Sakakawea

(Continued from Page A1)

"It's bull that we are letting out more water than we say we are," he said.

"Of course, the discharges fluctuate during the day, but the average was 23,500," he said. "As to water conservation, we delayed the start of the navigation season by one week and are ending it four weeks sooner. We are releasing less water than the 30-year average, which is 28,000 cfs in June, 30,000 cfs in July and 29,000 in August.

"We are reducing flows in September and October to 14,000 cfs. November and December will be 20,000 and January 25,000," he said. "We will be producing less electricity."

Ev Haunson of Mandan was so angry at the corps' statements he dug through five years of Bismarck Tribunes to get lake and river figures.

Those records showed water has been flooding out of Lake Sakakawea 4,000 to 5,000 cfs faster than during summers dating back to 1985, he said.

River levels at Bismarck usually hovered between 6 feet, 3 inches and 6 feet, 5 inches, he found, but this summer, the Missouri has been between 7 feet, 6 inches and 7 feet, 8 inches.

Pick City Mayor Connie Parish said her community already is hav-

ing trouble getting municipal water because of the low lake level.

"We've replaced our water pumps twice, thinking they were bad," Parish said. "It turns out that they just can't pump water that high. We're just hoping that a bigger pump will be able to do the job."

At the Wayne Boeshans farm north of Deulah, irrigation water has to be pumped in two stages to get to the crops instead of being trapped in a reservoir and pumped once like in other years.

The corps announced earlier it would extend boat ramps along the lake, though some call that a "token" gesture. Doug Eiken, state parks and recreation director, said he hopes it may be the start of bet-

ter communication with the corps on water issues.

But Fred Ryckman, state fisheries development coordinator, warned the March 1990 elevation of Lake Sakakawea predicted by the corps — at 1,816 feet above sea level — would be a record low.

"If we hit that, and it could easily go lower, every ramp on the lake will be out of commission," he said in a statement. "We need to pray that Rocky Mountain snow skiers have the best and longest year ever — then the runoff and the June rise will solve most of our problems."

ITOR

7

North Dakota Chafes At Draining Lake To Fill 'Big Muddy'

By Laurent Belais

Staff writer of The Christian Science Monitor

STATION, N.D.

A CONTINUING drought is starting to create a Midwestern version of the water battles out West.

Downstream, Midwestern shipping and hydroelectric power stations rely on a constant flow of river water. Upstream, resorts and recreation spots are seeing their most precious resource flow away. Perhaps the region's biggest tug of war is here at Lake Sakakawea, the largest lake in North Dakota and one of the largest man-made lakes in the United States.

"I figure 27 feet," says Richard Ganerke, eyeing the precipitous drop in the lake level with a fisherman's eye. A year ago, the water dropped so fast that the fishing boat he'd left in the lake was mired in mud four days later.

The lake is being drained to keep the Missouri River high enough for barges to carry grain and for hydroelectric power stations to generate electricity. But here, the low lake level has ruined the tourist season in places, with water receding thousands of feet from marinas and campgrounds. One of the three resorts has gone out of business and another, severely squeezed, because of two years of low water. North Dakotans are angry.

"To say that people here have reached a point of ultimate outrage is probably putting it mildly," says North Dakota Gov. George Sinner (D). The project has a long history of failed promises to the states of the upper Missouri River basin, including a cancelled federal appropriation to North Dakota for partial

compensation. "If that is in fact the attitude of Congress, let's take the dam out," Governor Sinner says. "That's how angry I am about this."

The same kind of struggle between upstream and downstream interests is also cropping up along the Mississippi River, says Brett Hulsey of the Sierra Club's Midwestern office. "I see greater competition in the future."

The tug of war has not reached the proportions of the West's water battles. But "there's obviously a lot of concern," says Paul Johnston, spokesman for the



Missouri River Division of the US Army Corps of Engineers. "It's quite a balancing act."

The Army Corps is reviewing its operating manual, which governs the release of water from the six dams along the Missouri River. To conserve water in the reservoirs, the Corps shortened the navigational season by three weeks last year and five weeks this year. This winter it will release an average of about 10,500 cubic feet per second — a record low.

Heavy rains and a large snow melt next spring would greatly alleviate the problem. But the immediate concern is winter. Last year, the low river level allowed ice jams to form, blocking the water and causing severe intake problems for several river communities drawing water from the Missouri. This year's release will be less than last year.

NEAL HERSCHEL — STAFF



LAKE SAKAKAWEA: The low lake level has ruined the tourist season in places, with water receding thousands of feet from marinas and campgrounds.

N.D. gives corps an earful

Few solutions offered to low lake

US. Army Corps of Engineers officials who toured drought-ravaged Lake Sakakawea provided a sympathetic ear but few promises for North Dakotans frustrated by the receding reservoir.

"I must say that the (lake) level is much lower than I thought it would be," Robert Page, an assistant U.S. Army secretary for civil works, said at a meeting called Tuesday to discuss the lake's problems.

But Page and other corps officials held out little hope that Sakakawea's fall would soon be reversed, although they promised continued assistance to help boaters get their craft on the water.

"Our core issue, plus interlocked, is access," said Gov. George Sinner, who led the afternoon tour. "If we can get access, we can survive for now."

The corps will help extend boat ramps, and even the use of Army surplus amphibious vehicles to haul boats to the water is being discussed, Sinner said.

"This has got nothing to do with laws ... This has got nothing to do with ethics. This has got a lot to do with a lot of folks who gave up a lot of land to put under water." — Steve Herman

Page also promised the corps would review its overall management plan for the six-reservoir Missouri River system, which now serves navigation and hydropower generation over recreation.

Sinner said he and the corps envoys discussed a number of options including extending channel dredging, (adjusting) the master plan and the flow of water.

"There is got to be a way of helping those people out there who are losing their business. We just have to come up with something," Sinner said. "We cannot give up."

The governor, however, warned against excessive negative coverage of the problem, saying that may dissuade whoever was still planning to use the river.

The corps officials were to travel to South Dakota for a similar serial tour today.

Sinner and other critics contend existing policy is outdated and has contributed to the lake's steep drop, and that revising it is essential to North Dakota's long-term well-being.

About 100 people attended the meeting, which was held Tuesday night in a conference room at the state Game and Fish Department building. Page, Sinner and other

(More on WATER, back page)



Gov. George Sinner confers with Col. Dan Hazen, center, and Brig. Gen. Patrick Kelly.

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Lake Sak

Water: Witnesses say they feel betrayed by engineers

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officials listened to a procession of North Dakotans give often-emotional accounts of the problems caused by the falling lake.

"I think we're beyond the point of extending boat ramps," said Jim Nagel of Bismarck, a spokesman for sport-fishing interests. "We've got to look at some additional water."

Nagel pulled a mangled boat propeller from a white cardboard box to illustrate the hazards of navigating in newly shallow parts of the lake.

"I came bearing gifts today. I have a gift here for the Corps of Engineers," Nagel said as he plopped the white propeller on the table in front of Sinner. It remained there for the rest of the meeting.

Steve Herman, owner of Twin City Marine in Bismarck, said the receding lake represented a betrayal to North Dakotans who were initially given glowing accounts of the lake's possible benefits.

North Dakota has seen little irrigation from the lake, and now recreational advantages are turning sour, he said.

"A man lives by his word up here in this country," Herman said. "This has got nothing to do with laws ... This has got nothing to do with ethics. This has got a lot to do with a lot of folks who gave up a lot of land to put under water."

Warren Enyart, who is active in promoting economic development for the city of Riverdale on the lake's east end, ripped up a Riverdale promotional brochure to dramatize the problems caused by the lake's fluctuations.

Terry Fleck of Bismarck, who introduced himself by saying, "I own a boat, and I'm making payments," offered his boat to President Bush for use in the drug war in Columbia if the lake kept falling.

"If the lake goes down another six feet, I won't be using it anyway," Fleck said.

John Hanson, owner of Dakota Waters, a resort directly north of

Beulah, said publicly about the lake's problems had scared away tourists from his resort, which he said still had good access to the lake.

"People are not aware that Lake Sakakawea still is a very big lake, that it still does have tremendous recreational opportunities. The fishing has been great," Hanson said.

"But our nearby marketing strategies have been totally blown out of the water by this negative mind-set issue," Hanson said.

Lake Sakakawea, which pumps \$10 million into the North Dakota economy, is at historic lows after two drought-ridden summers and skimpy snow runoff upstream, state and federal officials say.

Many businesses, including four

major resorts, have grown up around Lake Sakakawea, which is 178 miles long and has 1,300 miles of recreational shoreline.

But the receding lake has left less than half of the lake's 39 boat ramps in the water, state officials say.

The lake's elevation was measured Tuesday at 1,825 feet above sea level. Corps statistics dating back to 1967 show an average elevation of 1,843.1 feet at September's end, said Larry Murphy, an engineer.

Tracy Potter, assistant tourism director for the state Economic Development Commission, said Lake Sakakawea's elevation needed to be at 1,850 feet "to keep everybody in the water and happy."